This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

3 3433 07601521 7

THE

JOHNS HOPKINS UNIVERSITY

REGISTER

1897-98

BALTIMORE
THE JOHNS HOPKINS PRESS
1898

THE NEW YORK
PUBLIC LIBRARY
09284
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1898.

BOARD OF TRUSTEES.

C. Morton Stewart, *President.*

Francis White, *Treasurer.*

Lewis N. Hopkins, *Secretary.*

Lewis N. Hopkins,
Francis White,
C. Morton Stewart,
J. Hall Pleasants,
Alan P. Smith,
James L. McLane,
W. Graham Bowdoin,
William T. Dixon,
Benjamin F. Newcomer,

The President of the University, *ex officio.*

COMMITTEES.

Executive Committee.

James L. McLane, Francis White, Benjamin F. Newcomer, C. Morton Stewart, *ex officio.*

The President of the University, *ex officio.*

Finance Committee.

Francis White, W. Graham Bowdoin, J. Hall Pleasants, Benjamin F. Newcomer, C. Morton Stewart, *ex officio.*

Building Committee.

J. Hall Pleasants, Alan P. Smith, James L. McLane, C. Morton Stewart, *ex officio.*

FACULTY.

Arranged in the several groups in the order of appointment.

DANIEL C. GILMAN, LL. D., *President of the University.*

A. B., Yale College, 1852, and A. M., 1855; LL. D., Harvard University, 1876, St. John's College, 1876, Columbia University, 1887, Yale University, 1889, University of North Carolina, 1889, and Princeton University, 1896; Librarian, Secretary of the Sheffield Scientific School, and Professor of Physical and Political Geography in Yale College, 1856-72; President of the University of California, 1872-75; Corresponding Member of the British Association; Officer of Public Instruction in France; President of the American Oriental Society, 1893-99.

1300 Eutaw Place.

BASIL L. GILDERSLEEVE, PH. D., LL. D., *Professor of Greek.*

A. B., Princeton University, 1849, and A. M., 1852; Ph. D., University of Göttingen, 1853; LL. D., College of William and Mary, 1869, and Harvard University, 1886; Professor of Greek in the University of Virginia, 1856-76; Professor of Latin in the University of Virginia, 1861-66; D. C. L., University of the South, 1884; Hon. Member of the Cambridge Philological Society, of the Philological Syllogos of Constantinople, and of the Archæological Society of Athens; *Editor of the American Journal of Philology.*

1002 N. Calvert St.

IRA REMSEN, M. D., PH. D., LL. D., *Professor of Chemistry, and Director of the Chemical Laboratory.* 12 E. Biddle St.

A. B., College of the City of New York, 1865; M. D., College of Physicians and Surgeons, N. Y., 1867; Ph. D., University of Göttingen, 1870; LL. D., Columbia University, 1893, and Princeton University, 1896; Professor of Chemistry in Williams College, 1872-76, and previously Assistant in Chemistry in the University of Tübingen; Corresponding Member of the British Association; Foreign Member, Chemical Society of London; *Editor of the American Chemical Journal; Secretary of the Academic Council.*

HENRY A. ROWLAND, PH. D., LL. D., *Professor of Physics, and Director of the Physical Laboratory.* 915 Cathedral St.

C. E., Rensselaer Polytechnic Institute, 1870; Assistant Professor in the same, 1872-75; Ph. D. (Hon.), Johns Hopkins University, 1880; LL. D., Yale University, 1895, and Princeton University, 1896; Honorary Member of the Physical Society of London, of the French Physical Society, of the Groenian Academy of Natural Sciences, Sicily, and of the Literary and Philosophical Society of Manchester; Corresponding Member of the British Association and of the Royal Society of Göttingen; Member of the Cambridge (Eng.) Philosophical Society; Foreign Member of the Royal Society of London, of the Stockholm Academy of Sciences, of the Reale Accademia dei Lincei, Rome, of the Italian Society of Spectroscopists; Foreign Correspondent, French Academy of Sciences; Officer of the Legion of Honor of France; Hon. Fellow of the Royal Society of Edinburgh.

PAUL HAUPT, PH. D., *Professor of the Semitic Languages.* 2315 Linden Av.

Gymnasium Augustum, Görlitz, 1876; Ph. D., University of Leipsic, 1878; *Privat-docent* in the University of Göttingen, 1880, and Professor of Assyriology in the same, 1883; Honorary Curator of the Collection of Oriental Antiquities in the U. S. National Museum, Washington, D. C.; *Co-editor of The Assyriological Library, and of Contributions to Assyriology and Comparative Semitic Philology; Editor of the Sacred Books of the Old Testament.*

WILLIAM H. WELCH, M. D., LL. D., *Professor of Pathology, and Dean of the Medical Faculty.* 935 St. Paul St.

A. B., Yale College, 1870; M. D., College of Physicians and Surgeons (N. Y.), 1875; LL. D., Western Reserve University, 1894, and Yale, 1896; M. D. (Hon.), University of Pennsylvania, 1894; late Professor of Pathological Anatomy and General Pathology in the Bellevue Hospital Medical College; President of the Medical and Chirurgical Faculty of Maryland, 1891-92; *Pathologist to the Johns Hopkins Hospital; Editor of the Journal of Experimental Medicine.*

SIMON NEWCOMB, PH. D., LL. D., *Professor of Mathematics and Astronomy.*

S. B., Harvard University, 1858; LL. D., Columbian University, 1874, Yale, 1875, Harvard, 1884, Columbia, 1887, Edinburgh, 1891, Cambridge, 1896, Glasgow, 1896, and Princeton, 1896; Ph. D. (Hon.), University of Leyden, 1875; Ph. D. (Hon.), University of Heidelberg, 1886; Dr. Sc., University of Dublin, 1892; Dr. Nat. Phil., University of Padua, 1892; Senior Professor of Mathematics, U. S. Navy, and Superintendent of the American Ephemeris and Nautical Almanac, 1877-97; Associate, Royal Astronomical Society, 1872; Corresponding Member, Institute of France, 1874, and Foreign Associate, 1896; Foreign Member of the Royal Society of London and of the Reale Accademia dei Lincei, Rome; Member of the Academies in Berlin, St. Petersburg, Munich, Stockholm, Amsterdam, etc.; Copley Medalist, Royal Society, London, 1890; Honorary Member, Royal Institution of Great Britain; Officer of the Legion of Honor of France; Editor of the American Journal of Mathematics, 1884-94.

1620 P St., Washington.

The duties of Professor Newcomb as a teacher terminated January 1, 1894.

EDWARD H. GRIFFIN, D. D., LL. D., *Professor of the History of Philosophy, and Dean of the College Faculty.* 1027 N. Calvert St.

A. B., Williams College, 1862, and A. M., 1865; Union Theological Seminary, New York, 1867; D. D., Amherst College, 1880; LL. D., Princeton University, 1888; Professor of Latin in Williams College, 1872-81, Professor of Rhetoric, 1881-85, and Mark Hopkins Professor of Intellectual and Moral Philosophy, 1885-89.

WILLIAM OSLER, M. D., LL. D., F. R. C. P., *Professor of the Principles and Practice of Medicine.* 1 W. Franklin St.

M. D., McGill University, 1872, and LL. D., 1895; Fellow of the Royal College of Physicians, London; Professor of the Institutes of Medicine, McGill University, Montreal, 1874–84; Professor of Clinical Medicine, University of Pennsylvania, 1884–89; *Physician in Chief to the Johns Hopkins Hospital; Associate Editor of the Journal of Experimental Medicine.*

HENRY M. HURD, A. M., M. D., LL. D., *Professor of Psychiatry.*

A. B., University of Michigan, 1863, and A. M., 1870; M. D., University of Michigan, 1866, and LL. D., 1895; Superintendent of the Eastern Michigan Asylum, 1878–89; *Editor of the Johns Hopkins Hospital Bulletin; Editor of the American Journal of Insanity; Superintendent of the Johns Hopkins Hospital.* Johns Hopkins Hospital.

HOWARD A. KELLY, A. M., M. D., *Professor of Gynecology.*

A. B., University of Pennsylvania, 1877, and M. D., 1882; Associate Professor of Obstetrics, University of Pennsylvania, 1888–89; *Gynecologist to the Johns Hopkins Hospital.* 1406 Eutaw Place.

HERBERT B. ADAMS, PH. D., LL. D., *Professor of American and Institutional History.* 1025 Cathedral St.

A. B., Amherst College, 1872; Ph. D., University of Heidelberg, 1876; LL. D., University of Alabama, 1891; Fellow of the Johns Hopkins University, 1876–78; *Editor of the Studies in Historical and Political Science.*

WILLIAM K. BROOKS, PH. D., LL. D., *Professor of Zoölogy, and Director of the Chesapeake Zoölogical Laboratory.* Lake Roland.

A. B., Williams College, 1870; Ph. D., Harvard University, 1875; LL. D., Williams College, 1893; Fellow of the Royal Microscopical Society of London; *Editor of the Memoirs from the Biological Laboratory.*

MAURICE BLOOMFIELD, PH. D., LL. D., *Professor of Sanskrit and Comparative Philology.* 861 Park Av.

A. M., Furman University, 1877; Fellow, Johns Hopkins University, 1878–79, and Ph. D., 1879; LL. D., Princeton University, 1896; Foreign Member, Royal Bohemian Society in Prague.

THOMAS CRAIG, PH. D., *Professor of Pure Mathematics.* 1822 St. Paul St.

C. E., Lafayette College, 1875; Fellow, Johns Hopkins University, 1876–79, and Ph. D., 1878; *Editor of the American Journal of Mathematics.*

A. MARSHALL ELLIOTT, PH. D., LL. D., *Professor of the Romance Languages.*

A. B., Haverford College, 1866, and A. M., 1878; A. B., Harvard University, 1868; Ph. D. (Hon.), Princeton University, 1877; LL. D., Wake Forest College, 1891; *Editor of Modern Language Notes.* 935 N. Calvert St.

WILLIAM S. HALSTED, M. D., *Professor of Surgery.* 1201 Eutaw Place.

A. B., Yale College, 1874; M. D., College of Physicians and Surgeons (New York), 1877; formerly Attending Surgeon to the Presbyterian and Bellevue Hospitals, New York; *Surgeon in chief to the Johns Hopkins Hospital and Chief of the Dispensary.*

HARMON N. MORSE, PH. D., *Professor of Analytical Chemistry, and Sub-Director of the Chemical Laboratory.* 726 Reservoir St.

A. B., Amherst College, 1873; Ph. D., University of Göttingen, 1875; Instructor in Chemistry, Amherst College, 1875–76.

MINTON WARREN, PH. D., *Professor of Latin.* 1503 Madison Av.

A. B., Tufts College, 1870; Ph. D., University of Strassburg, 1879; Director, American School of Classical Studies in Rome, 1896–97.

HENRY WOOD, PH. D., *Professor of German.* 109 W. North Av.

A. B., Haverford College, 1869; Ph. D., University of Leipsic, 1879.

EDWARD RENOUF, PH. D., *Collegiate Professor of Chemistry, and Acting Director of the Gymnasium.* 416 W. Hoffman St.

Ph. D., University of Freiburg, 1880; Assistant in Chemistry in the University of Munich, 1880–85.

JOHN J. ABEL, M. D., *Professor of Pharmacology.* 1604 Bolton St.

Ph. B., University of Michigan, 1883; M. D., University of Strassburg, 1888; Professor of Materia Medica and Therapeutics, University of Michigan, 1891–93; *Associate Editor of the Journal of Experimental Medicine.*

WILLIAM H. HOWELL, PH. D., M. D., *Professor of Physiology.*

A. B., Johns Hopkins University, 1881, Fellow, 1882–84, and Ph. D., 1884; M. D., University of Michigan, 1890; Lecturer and Professor of Physiology and Histology, University of Michigan, 1889–92; Associate Professor of Physiology, Harvard University, 1892–93; *Associate Editor of the Journal of Experimental Medicine.*

232 W. Lanvale St.

FRANKLIN P. MALL, M. D., *Professor of Anatomy.* 200 E. Preston St.

M. D., University of Michigan, 1883; Fellow, Johns Hopkins University, 1886–88; Adjunct Professor of Anatomy, Clark University, 1889–92; Professor of Anatomy, University of Chicago, 1892–93.

JAMES W. BRIGHT, PH. D., *Professor of English Philology.*

A. B., Lafayette College, 1877; Fellow, Johns Hopkins University, 1880–82, and Ph. D., 1882; Hon. Secretary for America (South and West) of the Early English Text Society; *Editor of the Publications of the Modern Language Association of America; Associate Editor of Modern Language Notes.*

259 W. Hoffman St.

WILLIAM HAND BROWNE, M. D., *Professor of English Literature.*

M. D., University of Maryland, 1850; Librarian and Associate, 1879–91. Sherwood.

HERBERT EVELETH GREENE, PH. D., *Collegiate Professor of English.*

A. B., Harvard University, 1881, A. M., 1884, and Ph. D., 1888; Professor of English in Wells College, 1891–93.

1019 St. Paul St.

WM. BULLOCK CLARK, PH. D., *Professor of Organic Geology, and Director of the Geological Laboratory.* 8 E. Read St.

A. B., Amherst College, 1884; Ph. D., University of Munich, 1887; *Director of the Maryland State Weather Service; State Geologist of Maryland.*

WILLIAM D. BOOKER, M. D., *Clinical Professor of Diseases of Children.*

M. D., Univ. of Virginia, 1867; *Associate in Pediatrics, Johns Hopkins Hospital and Dispensary.*

851 Park Av.

JOHN N. MACKENZIE, M. D., *Clinical Professor of Laryngology.*

M. D., Univ. of Virginia, 1876, and New York Univ., 1877; *Laryngologist, Johns Hopkins Hospital and Dispensary.*

879 Park Av.

SAMUEL THEOBALD, M. D., *Clinical Professor of Ophthalmology and Otology.*

M. D., Univ. of Maryland, 1867; *Ophthalmic and Aural Surgeon, Johns Hopkins Hospital and Dispensary.*

304 W. Monument St.

HENRY M. THOMAS, M. D., *Clinical Professor of Diseases of the Nervous System.* 1228 Madison Av.

M. D., University of Maryland, 1884; *Assistant, Johns Hopkins Hospital and Dispensary.*

NICHOLAS MURRAY, A. B., LL. B., *Librarian.* 621 St. Paul St.

A. B., Williams College, 1862; LL. B., Columbia College, 1866.

EDWARD H. SPIEKER, PH. D., *Associate Professor of Greek and Latin.*

A. B., Johns Hopkins University, 1879, Fellow, 1880–82, and Ph. D., 1882; *Secretary of the Board of Collegiate Advisers.*

915 Edmondson Av.

LOUIS DUNCAN, PH. D., *Associate Professor of Electricity.*

U. S. Naval Academy, 1880; Ensign, U. S. Navy, 1883–86; Ph. D., Johns Hopkins University, 1885; President of the American Institute of Electrical Engineers, 1895. 1211 N. Calvert St.

ETHAN A. ANDREWS, PH. D., *Associate Professor of Biology.* 821 St. Paul St.

Ph. B., Yale College, 1881; Fellow, Johns Hopkins University, 1884–86, and Ph. D., 1887.

JOSEPH S. AMES, PH. D., *Associate Professor of Physics, and Sub-Director of the Physical Laboratory.* The Albany.

A. B., Johns Hopkins University, 1886, Fellow, 1887–88, and Ph. D., 1890.

KIRBY F. SMITH, PH. D., *Associate Professor of Latin.* 1301 Maryland Av.

A. B., University of Vermont, 1884; Ph. D., Johns Hopkins University, 1889.

ADOLF RAMBEAU, PH. D., *Associate Professor of the Romance Languages.*
Wittenberg Gymnasium, 1871; Ph. D., University of Marburg, 1877; Professor in the Hamburg Gymnasium, 1888–92.
259 W. Hoffman St.

ALEXANDER S. CHESSIN, PH. D., *Associate Professor of Mathematics and Mechanics.* 503 Mosher St.
A. M., Imperial College of History and Philology, St. Petersburg, 1879; Ph. D., University of St. Petersburg, 1884.

CHARLES L. POOR, PH. D., *Associate Professor of Astronomy.*
S. B., College of the City of New York, 1886, and M. S., 1890; Fellow, Johns Hopkins University, 1889–90, and Ph. D., 1892; Instructor in the College of the City of New York, 1890–91.
1312 Eutaw Place.

SIDNEY SHERWOOD, PH. D., *Associate Professor of Political Economy.*
A. B., Princeton University, 1879; Ph. D., Johns Hopkins University, 1891; Instructor in Finance, University of Pennsylvania, 1891–92.
Roland Park.

JOHN MARTIN VINCENT, PH. D., *Associate Professor of History.*
A. B., Oberlin College, 1883, and A. M., 1888; Ph. D., Johns Hopkins University, 1890.
1915 Park Av.

SIMON FLEXNER, M. D., *Associate Professor of Pathology.*
M. D., University of Louisville, 1889; Fellow, Johns Hopkins University, 1891–92; *Resident Pathologist, Johns Hopkins Hospital.*
Johns Hopkins Hospital.

HARRY FIELDING REID, PH. D., *Associate Professor of Geological Physics.*
A. B., Johns Hopkins University, 1880, Fellow, 1882, and Ph. D., 1885; Professor of Mathematics (1886–89) and of Physics (1889–94), Case School of Applied Science; Associate Professor of Physical Geology, University of Chicago, 1895–97.
608 Cathedral St.

J. WHITRIDGE WILLIAMS, M. D., *Associate Professor of Obstetrics.*
A. B., Johns Hopkins University, 1886; M. D., University of Maryland, 1888; *Associate in Obstetrics, Johns Hopkins Hospital.*
1128 Cathedral St.

LEWELLYS F. BARKER, M. B., *Associate Professor of Anatomy.*
M. B., University of Toronto, 1890; Fellow, Johns Hopkins University, 1892–94; *Assistant Resident Pathologist, Johns Hopkins Hospital.*
Johns Hopkins Hospital.

WILLIAM S. THAYER, M. D., *Associate Professor of Medicine.*
A. B., Harvard University, 1885, and M. D., 1889; *Resident Physician, Johns Hopkins Hospital.*
Johns Hopkins Hospital.

JOHN M. T. FINNEY, M. D., *Associate Professor of Surgery.*
A. B., Princeton University, 1884; M. D., Harvard University, 1888; *Associate in Surgery, Johns Hopkins Hospital.*
923 N. Charles St.

LORRAIN S. HULBURT, PH. D., *Collegiate Professor of Mathematics.*
A. B., University of Wisconsin, 1883, and A. M., 1888; Professor of Mathematics, University of South Dakota, 1887–91; Fellow, Clark University, 1891–92; Ph. D., Johns Hopkins University, 1894.
1425 Bolton St.

C. W. EMIL MILLER, PH. D., *Associate Professor of Greek.* York Road.
A. B., Johns Hopkins University, 1882, Fellow, 1883–85, and Ph. D., 1886.

PHILIP R. UHLER, *Associate in Natural History.* 254 W. Hoffman St.
Provost and Librarian of the Peabody Institute.

HERMANN S. HERING, M. E., *Associate in Electrical Engineering.*
S. B., University of Pennsylvania, 1885, and M. E., 1886; Instructor in the Philadelphia Manual Training School, 1886–87, and Professor of Mechanics and Applied Electricity, 1887–91.
1809 Park Av.

GEORGE P. DREYER, PH. D, *Associate in Biology.* 137 Jackson Place.
A. B., Johns Hopkins University, 1887, Fellow, 1889–90, and Ph. D., 1890.

BERT J. VOS, PH. D., *Associate in German.* 2416 St. Paul St.
A. B., University of Michigan, 1888; Fellow, Johns Hopkins University, 1889-91, and Ph. D., 1892; Instructor in the University of Chicago, 1892-93.

WYATT W. RANDALL, PH. D., *Associate in Chemistry.* 2208 Maryland Av.
A. B., St. John's College, 1884; Ph. D., Johns Hopkins University, 1890.

CHRISTOPHER JOHNSTON, JR., PH. D., *Associate in the Semitic Languages.*
B. Litt., University of Virginia, 1876, A. B., 1878, and A. M., 1879; M. D., University of Maryland, 1880; Fellow, Johns Hopkins University, 1889-91, and Ph. D., 1894. 709 St. Paul St.

BERNARD C. STEINER, PH. D., *Associate in History.* 1038 N. Eutaw St.
A. B., Yale University, 1888, and A. M., 1890; Fellow, Johns Hopkins University, 1890-91, and Ph. D., 1891; LL. B., University of Maryland, 1894; Instructor in Williams College, 1891-92; Librarian, Enoch Pratt Free Library.

HERBERT G. GEER, M. E., *Associate in Mechanical Engineering.*
M. E., Cornell University, 1893. 532 E. Twenty-second St.

EDWARD B. MATHEWS, PH. D., *Associate in Mineralogy.* 924 W. North Av.
A. B., Colby University, 1891; Fellow, Johns Hopkins University, 1893-94, and Ph. D., 1894.

WILLIAM W. RUSSELL, M. D., *Associate in Gynecology.*
M. D., University of Pennsylvania, 1890; *Associate in Gynecology, Johns Hopkins Hospital.* Johns Hopkins Hospital.

HENRY J. BERKLEY, M. D., *Associate in Neuro-Pathology.* 1303 Park Av.
M. D., University of Maryland, 1881.

T. CASPAR GILCHRIST, M. B., *Associate in Dermatology.* 317 N. Charles St.
M. B., University of London, 1886; M. R. C. S., London; *Dermatologist, Johns Hopkins Hospital and Dispensary.*

J. WILLIAMS LORD, M. D., *Associate in Dermatology and Instructor in Anatomy.* 825 N. Arlington Av.
A. B., Johns Hopkins University, 1884; M. D., University of Pennsylvania, 1887; *Dermatologist, Johns Hopkins Hospital and Dispensary.*

ROBERT L. RANDOLPH, M. D., *Associate in Ophthalmology and Otology.*
M. D., University of Maryland, 1884; *Assistant Ophthalmic and Aural Surgeon, Johns Hopkins Hospital and Dispensary.* 816 Park Av.

JACOB H. HOLLANDER, PH. D., *Associate in Economics.* 2011 Eutaw Place.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1894.

WESTEL W. WILLOUGHBY, PH. D., *Associate in Political Science.*
A. B., Johns Hopkins University, 1888, Fellow, 1890-91, and Ph. D., 1891. Washington.

THOMAS B. ALDRICH, PH. D., *Associate in Physiological Chemistry.*
Ph. D., University of Jena, 1891, and Assistant in Chemistry, 1891-92. 1601 Madison Av.

THOMAS B. FUTCHER, M. B., *Associate in Medicine.* Johns Hopkins Hospital.
M. B., University of Toronto, 1893.

WILLIAM J. A. BLISS, PH. D., *Associate in Physics.* 1017 St. Paul St.
A. B., Harvard University, 1888; Ph. D., Johns Hopkins University, 1894.

C. CARROLL MARDEN, PH. D., *Associate in Romance Languages.*
A. B., Johns Hopkins University, 1889, and Ph. D., 1894; Instructor, University of Michigan, 1890-91. 1911 Park Av.

JOSEPH C. BLOODGOOD, M. D., *Associate in Surgery.*
S. B., University of Wisconsin, 1888; M. D., University of Pennsylvania, 1891; *Resident Surgeon, Johns Hopkins Hospital.* Johns Hopkins Hospital.

THOMAS S. CULLEN, M. B., *Associate in Gynecology.* 3 W. Preston St.
M. B., University of Toronto, 1890.

ROSS G. HARRISON, PH. D., *Associate in Anatomy.* 2018 Park Av.
A. B., Johns Hopkins University, 1889, Fellow, 1893-94, and Ph. D., 1894; Lecturer, Bryn Mawr College, 1894-95.

S. EDWIN WHITEMAN, *Instructor in Drawing.* Mt. Washington.
École des Beaux-Arts, Paris.

J. ELLIOTT GILPIN, PH. D., *Instructor in Chemistry.* 341 Dolphin St.
A. B., Johns Hopkins University, 1889, and Ph. D., 1892.

J. BASCOM CRENSHAW, PH. D., *Instructor in Physical Training.*
A. M., Randolph-Macon College, 1881; Ph. D., Johns Hopkins University, 1893.
600 N. Howard St.

MELVIN BRANDOW, A. B., *Assistant Librarian.* 2714 Parkwood Av.
A. B., Rutgers College, 1888; Fellow, Johns Hopkins University, 1892-93.

ALBERT C. CRAWFORD, M. D., *Assistant in Pharmacology.* 1009 N. Caroline St.
M. D., College of Physicians and Surgeons (Balt.), 1893.

ABRAHAM COHEN, PH. D., *Instructor in Mathematics.* 1412 Linden Av.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1894.

THOMAS S. BAKER, PH. D., *Instructor in German.* 1202 Mt. Royal Av.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1895.

HARRY C. JONES, PH. D., *Instructor in Physical Chemistry.*
A. B., Johns Hopkins University, 1889, Fellow, 1891-92, and Ph. D., 1892.
1128 McCulloh St.

GEORGE C. KEIDEL, PH. D., *Instructor in Romance Languages.* Catonsville.
A. B., Johns Hopkins University, 1889, Fellow, 1893-95, and Ph. D., 1895.

HARRY L. WILSON, PH. D., *Instructor in Latin.* 1111 Bolton St.
A. B., Queen's University (Ont.), 1887, and A. M., 1888; Fellow, Johns Hopkins University, 1895, and Ph. D., 1896.

ADOLPH G. HOEN, M. D., *Instructor in Photo-Micrography.* 713 York Road.
M. D., University of Maryland, 1872.

GEORGE W. DOBBIN, M. D., *Assistant in Obstetrics.* Johns Hopkins Hospital.
A. B., Johns Hopkins University, 1891; M. D., University of Maryland, 1894; *Assistant Obstetrician, Johns Hopkins Hospital.*

FRANK R. SMITH, M. D., *Instructor in Medicine.* 1126 Cathedral St.
M. D., University of Maryland, 1891; *Chief of Medical Clinic, Johns Hopkins Dispensary.*

JAMES C. BALLAGH, PH. D., *Instructor in History.* 229 W. Lafayette Av.
A. B., Johns Hopkins University, 1894, and Ph. D., 1895.

SYDNEY M. CONE, M. D., *Assistant in Surgical Pathology.* 1616 Eutaw Place.
A. B., Johns Hopkins University, 1890; M. D., University of Pennsylvania, 1893.

WALTER JONES, PH. D., *Assistant in Physiological Chemistry.*
A. B., Johns Hopkins University, 1888, and Ph. D., 1891. 1010 McCulloh St.

LOUIS E. LIVINGOOD, M. D., *Assistant in Pathology.*
A. B., Princeton University, 1890; M. D., University of Pennsylvania, 1895; Fellow, Johns Hopkins University, 1895-96; *Bacteriologist, Johns Hopkins Hospital.* Johns Hopkins Hospital.

CHARLES L. REESE, PH. D., *Assistant in Chemistry.* 1801 Linden Av.
Ph. D., University of Heidelberg, 1886.

H. BARTON JACOBS, M. D., *Instructor in Medicine.* 906 Cathedral St.
A. B., Harvard University, 1883, M. D., 1887, and Assistant in Botany, 1883-85.

STEWART L. PATON, M. D., *Assistant in Diseases of the Nervous System.*
M. D., College of Physicians and Surgeons (N. Y.), 1889. 58 W. Biddle St.

EDWARD C. ARMSTRONG, PH. D., *Instructor in Romance Languages.*
A. B., Randolph-Macon College, 1890, and A. M., 1894; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897.
Roland Park.

CHARLES R. BARDEEN, M. D., *Assistant in Anatomy.* 935 St. Paul St.
A. B., Harvard University, 1893; M. D., Johns Hopkins University, 1897.

N. ERNEST DORSEY, PH. D., *Assistant in Physics.* 1124 McCulloh St.
A. B., Johns Hopkins University, 1893, Fellow, 1896-97, and Ph. D., 1897.

OLIVER L. FASSIG, S. B., *Instructor in Climatology.* 2134 Bolton St.
S. B., Ohio State University, 1882; U. S. Weather Bureau.

WILLIAM T. MATHER, PH. D., *Assistant in Physics.* 1104 McCulloh St.
A. B., Amherst College, 1886, and A. M., 1891; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897.

PHILIP OGDEN, PH. D., *Instructor in Romance Languages.* 1314 Park Av.
A. B., Cornell University, 1891; Ph. D., Johns Hopkins University, 1897.

GEORGE B. SHATTUCK, PH. D., *Assistant in Geology.* 611 W. North Av.
S. B., Amherst College, 1892; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897.

HARVEY W. CUSHING, M. D., *Instructor in Surgery.*
A. B., Yale University, 1891; M. D., Harvard University; *Assistant Surgeon, Johns Hopkins Hospital.*
Johns Hopkins Hospital.

NORMAN MACL. HARRIS, M. B., *Assistant in Pathology.* 1020 N. Broadway.
M. B., University of Toronto, 1894.

JESSE W. LAZEAR, M. D., *Assistant in Clinical Microscopy.*
A. B., Johns Hopkins University, 1889; M. D., College of Physicians and Surgeons (N. Y.), 1892.
127 W. Lanvale St.

GEORGE LEFEVRE, PH. D., *Assistant in Zoology, etc.* 1802 Linden Av.
A. B., Johns Hopkins University, 1891, Fellow, 1894-95, Bruce Fellow, 1895-97, and Ph. D., 1896.

JACOB L. WALZ, *Assistant in Pharmacy.* 743 Dolphin St.
Ph. G., Maryland College of Pharmacy, 1888; *Pharmacist, Johns Hopkins Hospital.*

LECTURERS, 1897-98.

On the Turnbull Foundation.

Professor CHARLES R. LANMAN, Ph. D., of Harvard University.
Eight lectures on the *Poetry of India.*

On the Levering Foundation.

Rev. FRANCIS L. PATTON, D. D., LL. D., President of Princeton University.
Three lectures on *Morals and Religion.*

On the Donovan Foundation.

RICHARD BURTON, Ph. D., of New York City.
Six lectures on *The Modern Novel.*

Professor WILLIAM KNIGHT, LL. D., of the University of St. Andrews.
Three lectures on *Shelley, Keats, and Coleridge.*

Rev. HENRY VAN DYKE, D. D., LL. D., of New York City.
Three lectures on *Wordsworth, Browning, and Tennyson.*

Professor WOODROW WILSON, Ph. D., LL. D., of Princeton University.
Three lectures on *Edmund Burke, Walter Bagehot, and Sir Henry Sumner Maine.*

History of Religions.

Rev. Professor T. K. CHEYNE, D. D., of the University of Oxford.
Six lectures on *Phases of Jewish Religious Life after the Exile.*

Lecturers before different departments of the University.

History and Politics.

DAVID MURRAY, LL. D., of New Brunswick, N. J.
Two lectures on *Education in Japan.*

Professor K. MITSUKURI, Ph. D., of the University of Tokio.
Two lectures on *Education in Japan.*

HENRY L. MOORE, Ph. D., of Smith College.
Twelve lectures on *The Application of Mathematics to Political Economy.*

Professor JAMES SCHOULER, LL. D., of Boston University.
One lecture on *Constitutional Amendments.*

WILLIAM HOWE TOLMAN, Ph. D., General Agent of the Association for Improving the Condition of the Poor, New York.
One lecture on *Municipal Reform in New York.*

TALCOTT WILLIAMS, Esq., of Philadelphia.
One lecture on *The City of Philadelphia.*

Systematic Botany.

BOLLING W. BARTON, M. D., of Baltimore.

Geology.

BAILEY WILLIS, C. E., M. E., of the U. S. Geological Survey.
Twenty-five lectures on *Stratigraphic and Structural Geology.*

Romance Languages.

Professor FREDERICK M. WARREN, Ph. D., of Adelbert College.
Eight lectures on *French Literature.*

Medical School.

ALEXANDER C. ABBOTT, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania.

JOHN S. BILLINGS, M. D., LL. D., Surgeon, U. S. Army, and late Librarian of the Surgeon-General's Office; Director of the New York Public Library.

ROBERT FLETCHER, M. D., Surgeon, U. S. Army.

Internes of the Johns Hopkins Hospital.

The following graduates of the Johns Hopkins Medical School are House Officers of the Johns Hopkins Hospital:

Thomas R. Brown, M. D.
A. B., Johns Hopkins University, 1892, and M. D., 1897.

Walter S. Davis, M. D.
S. B., Amherst College, 1893; M. D. (J. H. U.), 1897.

Louis P. Hamburger, M. D.
A. B., Johns Hopkins University, 1893, and M. D., 1897.

Guy L. Hunner, M. D.
S. B., University of Wisconsin, 1893; M. D. (J. H. U.), 1897.

Irving P. Lyon, M. D.
A. B., Yale University, 1893; M. D. (J. H. U.), 1897.

William G. MacCallum, M. D.
A. B., University of Toronto, 1894; M. D. (J. H. U.), 1897.

James F. Mitchell, M. D.
A. B., Johns Hopkins University, 1891, and M. D., 1897.

Eugene L. Opie, M. D.
A. B., Johns Hopkins University, 1893, and M. D., 1897.

Mary S. Packard, M. D.
A. B., Vassar College, 1892; M. D. (J. H. U.), 1897.

Omar B. Pancoast, M. D.
S. B., Swarthmore College, 1893; M. D. (J. H. U.), 1897.

Clement A. Penrose, M. D.
A. B., Johns Hopkins University, 1893, and M. D., 1897.

Richard P. Strong, M. D.
A. B., Yale University, 1893; M. D. (J. H. U.), 1897.

Additional Assistants for the Current Year.

The following names are those of students who render more or less service to the University in the departments named. In the enumeration, as in former years, such persons are not counted as members of the academic staff:

M. L. Barr, A. B.—*Y. M. C. A.*
A. H. Baxter, A. B.—*Italian.*
L. Brown, A. B.—*Anatomy.*
J. M. Flint, S. B.—*Anatomy.*
F. T. Fulton, A. B.—*Pathology.*
J. Hofmann.—*German.*
E. H. Hume, A. B.—*Physiological Chemistry.*
A. F. Kuersteiner, A. B.—*Romance Languages.*
G. C. Lee, A. B.—*Political Science and Elocution.*
A. G. Leonard, A. B.—*Geology.*
W. H. Lewis, S. B.—*Anatomy.*
J. B. MacCallum, A. B.—*Anatomy.*
E. W. Magruder, A. B.—*Chemistry.*
J. A. Ness, A. M.—*Sanskrit.*
E. S. Oliver, A. B.—*Anatomy.*
S. Rosenheim, A. B.—*Pharmacology.*
R. B. Rowe, Ph. B.—*Geology.*
F. R. Sabin, S. B.—*Anatomy.*
M. T. Sudler, S. B.—*Biology.*
W. T. Thom, A. M.—*English Composition.*
C. E. Waters, A. B.—*Chemistry.*
E. A. Wells, A. B.—*Physiological Chemistry.*
J. B. Whitehead.—*Electricity.*
R. H. Wilson, A. B.—*Romance Languages.*

GRADUATE STUDENTS.

FELLOWS BY COURTESY.

GEORGE MELVILLE BOLLING. Baltimore. *Washington, D. C.*
A. B., Loyola College, 1891; Fellow, Johns Hopkins University, 1893-94, and Ph. D., 1896; Assistant Professor of Comparative Philology, etc., Catholic University. *Sanskrit.*

WILLIAM ALEXANDER ECKELS. Carlisle, Pa. 210 *McMechen St.*
A. B., Dickinson College, 1883, and A. M., 1886; late Professor in Ripon College. *Greek, Latin, and English.*

EDWIN LUTHER GREEN. Richmond, Va. 622 *Dolphin St.*
A. B., Washington and Lee University, 1892; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897. *Greek, Latin, and Sanskrit.*

SAMUEL VERPLANCK HOFFMAN. New York City. [*Absent.*]
M. E., Stevens Institute of Technology, 1888; Fellow, Johns Hopkins University, 1893-94. *Astronomy, Physics, and Chemistry.*

HENRY MCELDERRY KNOWER. Baltimore. 3 *W. Biddle St.*
A. B., Johns Hopkins University, 1890. Fellow, 1894-95, Bruce Fellow, 1895-96, and Ph. D., 1896; late Instructor in Biology, Williams College. *Biology.*

FREDERICK ROBERTSON JONES. Baltimore. 1626 *Harlem Av.*
A. B., Western Maryland College, 1892; Ph. D., Johns Hopkins University, 1896; late Instructor in History, Western Maryland College. *History.*

PAUL HENRY LAND. Baltimore. 407 *W. Hoffman St.*
A. B., Calvin College (O.), 1890; Fellow, Johns Hopkins University, 1896-97. *Hebrew, Assyrian, and Greek.*

JOHN HOLLYDAY LATANE. Baltimore. 1412 *Park Av.*
A. B., Johns Hopkins University, 1892, and Ph. D., 1895. *History.*

EDWARD LINDON MELLUS. Baltimore. 10 *E. Chase St.*
M. D., Jefferson Medical College, 1878. *Physiology.*

CHARLES WILLIAM PEPPLER. Baltimore. 2662 *Pennsylvania Av.*
A. B., Johns Hopkins University, 1892, Fellow, 1895-96, and Ph. D., 1898. *Greek, Latin, and Sanskrit.*

KENJIRO OTA. Tokyo, Japan. 905 *McCulloh St.*
S. B., University of Tokyo, 1880; late Instructor in Chemistry, First High School, Tokyo. *Chemistry.*

FRANK ROY RUTTER. Baltimore. 1119 *Harlem Av.*
A. B., Johns Hopkins University, 1894, Fellow, 1896-97, and Ph. D., 1897. *Economics.*

GEORGE SHIPLEY. Baltimore. 1019 *Linden Av.*
A. B., Randolph-Macon College, 1887; Ph. D., Johns Hopkins University, 1897. *English.*

WILLIAM TAYLOR THOM. Ashton. 2428 *Eutaw Place.*
A. B., Washington and Lee University, 1869, A. M., 1870, and D. L., 1889. *History, Politics, and Economics.*

FREDERICK HENRY WILKENS. Baltimore. *The Albion.*
A. B., Johns Hopkins University, 1884; Ph. D., University of Leipsic, 1891; late Assistant Professor, University of Wisconsin. *German.*

(15)

ADAM T. BRUCE FELLOW.

DUNCAN STARR JOHNSON. Cromwell, Conn. 930 *Madison Av.*
S. B., Wesleyan University, 1892; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897. *Botany.*

FELLOWS.

CLEVELAND ABBE, JR. Washington, D. C. 611 *W. North Av.*
A. B., Harvard University, 1894, and A. M., 1896. *Geology, Petrography, and Biology.*

CHARLES HILLMAN BROUGH. Ogden, Utah. 1223 *Druid Hill Av.*
A. B., Mississippi College, 1894. *Economics, History, and Jurisprudence.*

PIERCE BUTLER. New Orleans, La. [*Absent.*]
A. B., Tulane University, 1892, and A. M., 1894. *English, French, and History.* Resigned, October 1, 1897.

KILLIS CAMPBELL. Enfield, Va. 1122 *McCulloh St.*
A. B. and B. L., University of Nashville, 1892; A. B., William and Mary College, 1894. *English, German, and French.*

GILMAN ARTHUR DREW. Newton, Iowa. 502 *W. Lafayette Av.*
S. B., Iowa State University, 1890. *Zoology, Physiology, and Botany.*

CHARLES WILSON GREENE. Stanford University, Cal. 409 *W. Hoffman St.*
A. B., Leland Stanford Jr. University, 1892, and A. M., 1893. *Physiology, Zoology, and Physics.*

KARL JOSEF GRIMM. Baltimore. 429 *N. Gilmor St.*
Tauberbischofsheim Gymnasium. *Semitic Languages.*

JAMES GRAHAM HARDY. Easton, Pa. 1504 *McCulloh St.*
A. B., Lafayette College, 1894. *Mathematics, Physics, and Philosophy.*

CHARLES HOEING. Lexington, Ky. 1217 *Madison Av.*
A. B., Kentucky State College, 1890, and A. M., 1892. *Latin, Greek, and Sanskrit.*

WILLIAM APP JONES. Hillsboro, N. C. 1119 *McCulloh St.*
A. B., Wake Forest College, 1893. *Chemistry, Geology, and Mineralogy.*

WILLIAM KURRELMEYER. Baltimore. 512 *N. Carrollton Av.*
A. B., Johns Hopkins University, 1896. *German, French, and Sanskrit.*

GUY CARLETON LEE. Chapel Hill, N. C. 1711 *Bolton St.*
LL. B., University of North Carolina, 1894; A. B. and LL. M., Dickinson College, 1896. *History, Jurisprudence, and Politics.*

CHARLES ELWOOD MENDENHALL. Worcester, Mass. 255 *W. Hoffman St.*
S. B., Rose Polytechnic Institute, 1894. *Physics, Mathematics, and Astronomy.*

SAMUEL ALFRED MITCHELL. Kingston, Ont. 1113 *Bolton St.*
A. M., Queen's University (Ont.), 1894. *Astronomy, Physics, and Mathematics.*

JENS ANDERSON NESS. Red Wing, Minn. 1122 *McCulloh St.*
A. B., Luther College, 1884, and A. M., 1890. *Sanskrit, Greek, and Latin.*

JOSEPH LONGWORTH NICHOLS. Cincinnati, Ohio. 935 *St. Paul St.*
A. B., Harvard University, 1893; M. D., Johns Hopkins University, 1897. *Pathology.*

WILLIAM ALBERT NITZE. Baltimore. *Roland Park.*
A. B., Johns Hopkins University, 1894. *French, Italian, and German.*

DANIEL ALLEN PENICK. Austin, Texas. 1119 *Bolton St.*
A. B., University of Texas, 1891, and A. M., 1892. *Greek, Latin, and Sanskrit.*

EBENEZER EMMET REID. Lynnhaven, Va. 1133 *Bolton St.*
A. M., Richmond College, 1892; Ph. D., Johns Hopkins University, 1893. *Chemistry, Physics, and Mathematics.*

WILLIAM BERNEY SAFFOLD. Selma, Ala. [*Absent.*]
A. B., University of Alabama, 1887, LL. B., 1888, and A. M., 1889; Ph. D., Johns Hopkins University, 1898. *Latin, Greek, and Sanskrit.* Resigned, October 1, 1897.

HENRY NEVILL SANDERS. Toronto, Ont. 2422 *Linden Av.*
A. B., Trinity University (Toronto), 1894. *Greek, Sanskrit, and Latin.*

CHARLES WILLIAM WAIDNER. Baltimore County. *Wetheredsville.*
A. B., Johns Hopkins University, 1896. *Physics, Mathematics, and Astronomy.* (22)

University Scholars.

Thomas Sewell Adams. Baltimore. 1405 *Hollins St.*
A. B., Johns Hopkins University, 1896. *Economics and History.*

Howard Bell Arbuckle. Lewisburg, W. Va. 112 *W. Twenty-second St.*
A. B., Hampden-Sidney College, 1889, and A. M., 1890. *Chemistry, Physiology, and Biology.*

Ernest Julius Becker. Baltimore. 2131 *Maryland Av.*
A. B., Johns Hopkins University, 1894. *English, German, and French.*

Edward William Berger. Berea, O. 1214 *Patterson Av.*
A. B., German Wallace College, 1891; Ph. B., Baldwin University, 1894. *Zoology, Physiology, and Botany.*

Frank Ringgold Blake. Baltimore. 1917 *Druid Hill Av.*
A. B., Johns Hopkins University, 1897. *Sanskrit, German, and Hebrew.*

Murray Peabody Brush. Columbus, O. 255 *W. Hoffman St.*
A. B., Princeton University, 1894. *French, Italian, and German.*

Joseph Scudder Chamberlain. Ames, Iowa. 1119 *McCulloh St.*
S. B., Iowa Agricultural College, 1890, and M. S., 1892. *Chemistry, Biology, and Geology.*

Charles Keyser Edmunds. Baltimore. 1413 *McCulloh St.*
A. B., Johns Hopkins University, 1897. *Physics, Electricity, and Mathematics.*

John Eiesland. Greenville, Pa. 1024 *McCulloh St.*
A. B., University of South Dakota, 1891. *Mathematics, Physics, and Astronomy.*

Caswell Grave. Monrovia, Ind. 1125 *Argyle Av.*
S. B., Earlham College, 1895. *Zoology, Botany, and Physiology.*

Hollister Adelbert Hamilton. Rochester, N. Y. 1126 *McCulloh St.*
A. B., University of Rochester, 1892. *Greek, Latin, and Sanskrit.*

Eugene de Forest Heald, Jr. Annapolis. 902 *St. Paul St.*
A. B., Johns Hopkins University, 1897. *English.*

Julian Huguenin. Charleston, S. C. 1219 *Madison Av.*
A. B., Charleston College, 1895. *English, German, and French.*

Thomas Madison Jones. Doe Hill, Va. 2804 *Evergreen Terrace.*
A. B., Randolph-Macon College, 1894. *Latin, Greek, and German.*

Cleophas Cisney O'Harra. Carthage, Ill. 1317 *W. Lafayette Av.*
A. B., Carthage College, 1891. *Geology, Petrography, and Biology.*

Herbert Meredith Reese. Baltimore. 2132 *Oak St.*
A. B., Johns Hopkins University, 1897. *Physics, Mathematics, and Chemistry.*

Frederick Albert Saunders. Ottawa, Canada. 1114 *McCulloh St.*
A. B., University of Toronto, 1895. *Physics, Mathematics, and Astronomy.*

Alexander Henry Schulz, Jr. Baltimore. 225 *S. Broadway.*
A. B., Johns Hopkins University, 1897. *Latin, Greek, and Sanskrit.*

St. George Leakin Sioussat. Baltimore County. *Lake Roland.*
A. B., Johns Hopkins University, 1896. *History and Politics.*

Josiah Morris Slemons. Salisbury. 1024 *N. Broadway.*
A. B., Johns Hopkins University, 1897. *Medicine.*

Louis Marshall Warfield. Savannah, Ga. 819 *Park Av.*
A. B., Johns Hopkins University, 1897. *Medicine.*

PHILOSOPHICAL STUDENTS.

GEORGE ERNEST BARNETT. Mocksville, N. C. 1205 *McCulloh St.*
A. B., Randolph-Macon College, 1891. *Economics and History.*

MORRIS LINCOLN BARR. Monmouth, Ill. 1124 *McCulloh St.*
A. B., Ohio Wesleyan University, 1890. *English, German, and History.*

JOHN WILLIAM BASORE. Broadway, Va. 1626 *Bolton St.*
A. B., Hampden-Sidney College, 1893. *Latin, Greek, and Sanskrit.*

ARTHUR HENRY BAXTER. Florence, Italy. 1307 *Bolton St.*
A. B., Johns Hopkins University, 1894. *Italian, French, and History.*

ROBERT BUCHANAN BEALE. Washington, D. C. *Washington.*
S. B., Maryland Agricultural College, 1896. *Electricity.*

ELBERT J. BENTON. Holton, Kan. 1312 *W. Lanvale St.*
S. B., Campbell University, 1892, and A. B., 1895. *History, Economics, and Jurisprudence.*

WILLIAM NOLAND BERKELEY. Charlottesville, Va. 1126 *McCulloh St.*
S. B., St. John's College, 1896. *Chemistry, Geology, and Physics.*

ARTHUR BIBBINS. Baltimore. 333 *N. Charles St.*
Ph. B., Albion College, 1887. *Geology.*

ROBERT MONTGOMERY BIRD. Petersburg, Va. 1608 *Linden Av.*
A. B. and S. B., Hampden-Sidney College, 1897. *Chemistry, Physics, and Mathematics.*

HOMER VAN VALKENBURG BLACK. Atlanta, Ga. 906 *McCulloh St.*
A. B., University of Georgia, 1896. *Chemistry, Mineralogy, and Geology.*

WILLIAM MARTIN BLANCHARD. Hertford, N. C. 1205 *McCulloh St.*
A. B., Randolph-Macon College, 1894, and A. M., 1897. *Chemistry, Physics, and Mathematics.*

WILLIAM BURKE BRADY. Harrisburg, Pa. 10 *E. Madison St.*
M. E., Lehigh University, 1897. *Electricity.*

Rev. WILLIAM WALKER BRANDER. Baltimore. 103 *N. Carey St.*
Virginia Military Institute, 1887; Virginia Theological Seminary, 1891. *History and Politics.*

GEORGE DOBBIN BROWN. Howard County. *St. Denis.*
A. B., Johns Hopkins University, 1895. *English.*

GEORGE GRIFFIN BROWNELL. Syracuse, N. Y. 1202 *Mt. Royal Av.*
A. B., Syracuse University, 1893, and A. M., 1896. *Spanish, French, and History.*

ISAAC BRONSON BURGESS. Morgan Park, Ill. 1120 *McCulloh St.*
A. B., Brown University, 1863, and A. M., 1886. *Latin, Greek, and Sanskrit.*

HORACE GREELEY BYERS. Pulaski, Pa. 1311 *Linden Av.*
A. B. and S. B., Westminster College (Pa.), 1895. *Chemistry, Physics, and Mathematics.*

Rev. WILLIAM CALDWELL. Baltimore. 301 *E. North Av.*
A. M., Southwestern Presbyterian University, 1888; Princeton Theological Seminary, 1891. *Semitic Languages.*

HORACE CAMPBELL. Edinburg, Va. 907 *McCulloh St.*
A. M., Randolph-Macon College, 1897. *Economics.*

HALL CANTER. Baltimore. 2315 *Madison Av.*
A. B., Randolph-Macon College, 1892, and A. M., 1897. *Chemistry.*

JOHN JAMES CANTEY. Summerton, S. C. 1120 *McCulloh St.*
A. B., Wofford College, 1895. *History, Economics, and Politics.*

WILLIAM ASBURY CASE. Baltimore. 23 *Chestnut Av.*
S. B., St. John's College, 1894, and A. M., 1897; M. S., Columbian University, 1895. *Chemistry and Physics.*

CHARLES EDWARD CASPARI. Baltimore. 1129 *Harlem Av.*
A. B., Johns Hopkins University, 1896. *Chemistry.*

WESLEY MANLEY CLEAVER. Catawissa, Pa. 625 *W. Mulberry St.*
S. B., Bloomsburg (Pa.) Normal School, 1880, and M. S., 1883; A. B., Amherst College, 1886. *Geology, Physics, and Chemistry.*

WILLIAM CHAMBERS COKER. Wilmington, N. C. *The Shirley.*
S. B., South Carolina College, 1894. *Biology and Geology.*

CHARLES GILPIN COOK. Glenville. 238 *W. Hoffman St.*
S. B., Haverford College, 1892, and A. M., 1893. *Chemistry, Geology, and Physics.*

JOHN CROSSAN COOPER. Pittsburg, Pa. *The Brexton.*
A.B., Princeton University, 1885; LL.B., Columbia University, 1887. *Biology and Chemistry.*

FRED. CRANE. Montclair, N. J. 312 *W. Biddle St.*
A. B., Union College, 1893, and A. M., 1896. *Chemistry, Physiology, and Physics.*

WAVERLEY BAYARD DANIEL. Garysburg, N. C. 1217 *Madison Av.*
A. M., Wake Forest College, 1892. *Latin, Greek, and Roman Law.*

HERBERT GROVE DORSEY. Granville, O. 1340 *Druid Hill Av.*
S. B., Denison University, 1897. *Electricity.*

JAMES MCDOWELL DOUGLAS. Gastonia, N. C. 1307 *Linden Av.*
A. B., Davidson College, 1893, and A. M., 1894. *Chemistry, Physics, and Mathematics.*

WILLIAM SIDNEY DREWRY. Fayetteville, N. C. 1608 *Linden Av.*
A. B., Ph. B., and A. M., University of Virginia, 1893. *History and Economics.*

HARLAN DUDLEY. Monroeville, O. 600 *N. Howard St.*
Ph. B., Oberlin College, 1897. *Chemistry and Physics.*

ROBERT FRANCIS EARHART. Moline, Ill. 1029 *W. Lanvale St.*
S. B., Northwestern University, 1892. *Physics and Mathematics.*

LUTHER PFAHLER EISENHART. York, Pa. 1122 *Madison Av.*
A. B., Pennsylvania College, 1896. *Mathematics, Physics, and Astronomy.*

JAMES REES EWING. Granville, O. 246 *W. Hoffman St.*
A. B., Ohio Wesleyan University, 1890. *History, Politics, and Philosophy.*

JAMES MARION FARR. Union, S. C. 1307 *Linden Av.*
A. B., Davidson College, 1894, and A. M., 1895. *English, German, and French.*

HERBERT BALDWIN FOSTER. Andover, Mass. 18 *E. Centre St.*
A. B., Harvard University, 1895. *Greek, Latin, and Sanskrit.*

WILLIAM LINWOOD FOUSHEE. Roxboro, N. C. 1119 *McCulloh St.*
A. M., Wake Forest College, 1894. *Greek, Latin, and Sanskrit.*

EDMUND FRANK. Petersburg, Ind. 820 *N. Eutaw St.*
S. B., Rose Polytechnic Institute, 1897. *Electricity.*

GEORGE STRONACH FRAPS. Raleigh, N. C. 1424 *Druid Hill Av.*
S. B., North Carolina Agricultural College, 1896. *Chemistry, Physics, and Geology.*

ADOLPH JOHN AUGUST FREDHOLM. Baltimore. 741 *George St.*
Agricultural Institute, Ultuna, Sweden. *Botany.*

PIERRE JOSEPH FREIN. Gt. Barrington, Mass. 637 *W. Franklin St.*
A. B., Williams College, 1892. *Romance Languages.*

WILLIAM CAZENOVE GARDNER. Dorsey. *Dorsey.*
A. B., Johns Hopkins University, 1893. *Hebrew.*

WIGHTMAN WELLS GARNER. Darlington, S. C. 422 *N. Greene St.*
A. B., South Carolina College, 1896. *Chemistry.*

ROBERT GARRETT. Baltimore County. *Govanstown.*
S. B., Princeton University, 1897. *History and Politics.*

JOHN TIMOTHY GERAGHTY. St. Paul, Minn. 703 *N. Howard St.*
A. B., St. Thomas' College, 1895; Ph. B., St. Paul's Seminary, 1897. *Chemistry, Biology, and Physics.*

WILLIAM FRANCIS GILL. Henderson, N. C. 1206½ *McCulloh St.*
A. B., Trinity College (N. C.), 1894. *Latin, Greek, and Roman Law.*

CLYDE CHEW GLASCOCK. Buckland, Va. 1120 *Linden Av.*
University of Virginia, 1892. *German, Latin, and French.*

LEONIDAS CHALMERS GLENN. Crowder's Creek, N. C. 411 *W. Hoffman St.*
A. B., University of South Carolina, 1891. *Geology, Palæontology, and Mineralogy.*

NATHANIEL EDWARD GRIFFIN. Baltimore. 1027 *N. Calvert St.*
A. B., Johns Hopkins University, 1894. *English, German, and Philosophy.*

Rev. ADOLPH GUTTMACHER. Baltimore. 1833 *Linden Av.*
A. B., University of Cincinnati, 1887. *Hebrew, Arabic, and Philosophy.*

SIVERT N. HAGEN. Hagan, Minn. 917 *McCulloh St.*
A. B., Luther College, 1896. *English, German and French.*

RICHARD CAMERON HALDEMAN. Harrisburg, Pa. 718 *N. Howard St.*
A. B., Yale University, 1896. *Electricity.*

CHARLIE MONROE HALL. Fargo, N. Dak. 1626 *Bolton St.*
S. B., North Dakota Agricultural College, 1895. *Geology, Mineralogy, and Chemistry.*

FRANK ARNOLD HANCOCK. Baltimore. 823½ *W. Lombard St.*
A. B., Johns Hopkins University, 1897. *Chemistry.*

LANCELOT MINOR HARRIS. Bloomington, Ind. [*Absent.*]
A. B., Washington and Lee University, 1888. *English, German, and History.*

CALEB NOTBOHM HARRISON. Milwaukee, Wis. 914 *N. Fulton Av.*
B. C. E., University of Wisconsin, 1882. *Physics, Astronomy, and Mathematics.*

JOSEPH CULVER HARTZELL. Orangeburg, S. C. 1604 *W. Fayette St.*
S. B., U. S. Grant University (Tenn.), 1892, and M. S., 1895. *Geology, Palæontology, and Mineralogy.*

JOSEPH CAWDELL HERRICK. University of Virginia. 1214 *Eutaw Place.*
A. B., University of Virginia, 1896. *Biology, Chemistry, and Physics.*

Rev. JULIUS HOFMANN. Baltimore. 915 *Harlem Av.*
University of Giessen. *German and French.*

CHARLES COLLIER HOLDEN. Raleigh, N. C. 347 *N. Charles St.*
A. B., Johns Hopkins University, 1888. *Romance Languages.*

WILLIS BOIT HOLMES. Cambridge, Mass. 1217 *McCulloh St.*
A. B., Harvard University, 1896, and A. M., 1897. *Chemistry, Geology, and Mineralogy.*

DAVID WILBUR HORN. Carlisle, Pa. 2257 *Madison Av.*
A. B., Dickinson College, 1897. *Chemistry, Physics, and Biology.*

SAMUEL FRANCIS HOWARD. Wilbraham, Mass. 1122 *McCulloh St.*
S. B., Massachusetts Agricultural College, 1894. *Chemistry, Physics, and Mathematics.*

FREELAND HOWE, JR. Norway, Me. 924 *W. North Av.*
A. B., Colby University, 1894. *Biology.*

WILLIAM BASHFORD HUFF. Boscobel, Wis. 300 *Dolphin St.*
A. B., University of Wisconsin, 1889; A. M., University of Chicago, 1896. *Physics.*

WALTER HULLIHEN. Staunton, Va. 1120 *Linden Av.*
A. B. and A. M., University of Virginia, 1896. *Latin, Greek, and German.*

ROBERT EDMUND HUMPHREYS. Cleveland, Tenn. 906 *McCulloh St.*
A. B. and A. M., Emory and Henry College, 1889. *Chemistry, Geology, and Mineralogy.*

GEORGE OSCAR JAMES. Bowers Hill, Va. 906 *McCulloh St.*
A. B., Johns Hopkins University, 1895. *Physics, Mathematics, and Astronomy.*

PERCY LEWIS KAYE. Iowa City, Iowa. 1123 *Linden Av.*
A. B., Iowa State University, 1895, and A. M., 1896. *History and Politics.*

JAMES WILLIAM KERN. Alexandria, Va. 326 *St. Paul St.*
University of Virginia, 1881. *Greek, Sanskrit, and Latin.*

STEPHEN HENRY KING. Baltimore. 1529 *Bolton St.*
M. D., Harvard University, 1872. *Chemistry and Physics.*

SAMUEL SHIPMAN KINGSBURY. Pittsburg, Pa. 1113 *Bolton St.*
A. B., Marietta College, 1893, and A. M., 1896. *Greek, Latin, and Sanskrit.*

ALBERT FREDERICK KUERSTEINER. Cincinnati, O. 905 *McCulloh St.*
A. B., University of Cincinnati, 1888. *Spanish, French, and History.*

JOHN WILLIAM LAWSON. Damascus. 1416 *Linden Av.*
S. B., Maryland Agricultural College, 1893. *Chemistry, Physics, and Mathematics.*

EDWARD MCCRADY L'ENGLE. Baltimore. 2208 *Maryland Av.*
A. B., St. John's College, 1897. *Biology, Chemistry, and German.*

ARTHUR GRAY LEONARD. Oberlin, O. 917 *McCulloh St.*
A. B., Oberlin College, 1889. *Geology, Palaeontology, and Biology.*

CARROLL HERMAN LITTLE. Hickory, N. C. 933 *McCulloh St.*
A. B., Roanoke College, 1893. *Greek, Latin, and German.*

CHARLES EDWARD LYON. Mt. Wilson. 1841 *Druid Hill Av.*
A. B., Johns Hopkins University, 1897. *German.*

EGBERT WATSON MAGRUDER. Charlottesville, Va. 315 *W. Hoffman St.*
A. B., Hampden-Sidney College, 1891. *Chemistry, Mineralogy, and Physics.*

Rev. JOHN DAMEN MAGUIRE. Washington, D. C. *St. Joseph's Seminary.*
A. B., La Salle College, 1886; S. T. B., Catholic University, 1891, and S. T. L., 1892. *Latin and Greek.*

Rev. RICHARD JOSEPH MARTIN. Baltimore. *Loyola College.*
Jesuit College, Feldkirch, Austria, 1877. *Physics and Chemistry.*

LOUIS WILSON MATTERN. Warrior's Mark, Pa. 1122 *McCulloh St.*
S. B., Pennsylvania State College, 1894. *Chemistry, Physiology, and Biology.*

CHARLES RANALD MCINNES. Vankleek Hill, Ont. 1113 *Bolton St.*
A. M., Queen's University (Ont.), 1896. *Mathematics, Physics, and Astronomy.*

ANDREW CYRUS MCLAUGHLIN. Austin, Texas. 1019 *Linden Av.*
S. B., University of Texas, 1896. *Geology and Chemistry.*

Rev. WILLIAM BRUCE MCPHERSON. Middle River. *Middle River.*
A. B., Hobart College, 1892, and A. M., 1895. *Semitic Languages.*

JOHN ELMER MEISENHELDER. Hanover, Pa. 1221 *Druid Hill Av.*
S. B., Pennsylvania College, 1897. *Biology and Physics.*

JOHN FRANKLIN MEYER. Penn Hall, Pa. 306 *E. Twenty-third St.*
A. B., Franklin and Marshall College, 1894, and A. M., 1897. *Physics, Chemistry, and Mathematics.*

LOUIS WARDLAW MILES. Baltimore. 514 *Cathedral St.*
A. B., Johns Hopkins University, 1894; M. D., University of Maryland, 1897. *English.*

ALFRED WILLIAM MILDEN. Cornwall, Ont. 1113 *Bolton St.*
A. B., University of Toronto, 1888. *Greek, Latin, and Sanskrit.*

WALTER ALEX. MONTGOMERY, JR. Raleigh, N. C. 1217 *Madison Av.*
A. B., Johns Hopkins University, 1892. *Greek, Latin, and Philosophy.*

DANIEL ESTON MOTLEY. Chatham, Va. 1024 *McCulloh St.*
A. B., Milligan College (Tenn.), 1894. *History, Economics, and Philosophy.*

WILLIAM STARR MYERS. Asheville, N. C. 1217 *McCulloh St.*
A. B., University of North Carolina, 1897. *History, Economics, and English.*

ROKURO NAKASEKO. Kyoto, Japan. 616 *N. Carey St.*
Doshisha University, 1889. *Chemistry.*

ROBERT STEWART NORRIS. Middletown, Conn. 1126 *McCulloh St.*
S. B., University of California, 1892; Ph. D., Johns Hopkins University, 1896-97. *Physiology.*

Rev. ANSELM ORTMANN, O. S. B. Collegeville, Minn. 101 *S. Mount St.*
A. B., St. John's University (Minn.), 1892, A. M. and Ph. B., 1896. *Physics, Mathematics, and Electricity.*

CHARLES WARNER PAINE. Delaware, O. 838 *N. Eutaw St.*
S. B., Ohio Wesleyan University, 1897. *History and Economics.*

D'ARCY PAUL PARHAM. Hampton, Va. 1019 *Linden Av.*
A. M., Randolph-Macon College, 1891. *English, German, and History.*

AUSTIN MCDOWELL PATTERSON. Xenia, O. 327 *W. Biddle St.*
A. B., Princeton University, 1897. *Chemistry.*

THOMAS DOBBIN PENNIMAN. Baltimore. 922 *Cathedral St.*
A. B., Johns Hopkins University, 1892. *Physics, Electricity, and Mathematics.*

LOUIS MAXWELL POTTS. Canonsburg, Pa. 1029 *W. Lanvale St.*
A. B., Washington and Jefferson College, 1896. *Physics.*

GEORGE LOVIC PIERCE RADCLIFFE. Lloyds. *Sudbrook Park.*
A. B., Johns Hopkins University, 1897. *History, Economics, and Politics.*

ALBERT MOORE REESE. Baltimore. 1435 *Bolton St.*
A. B., Johns Hopkins University, 1892. *Geology and Biology.*

EDWARD RHOADS. Germantown, Pa. 1516 *Eutaw Place.*
S. B., Haverford College, 1893. *Physics, Chemistry, and Mathematics.*

CAREY PEGRAM ROGERS. Apex, N. C. 1119 *McCulloh St.*
A. B., Wake Forest College, 1897. *Chemistry, Physics, and Biology.*

Rev. WILLIAM ROSENAU. Baltimore. 1618 *Druid Hill Av.*
A. B., University of Cincinnati, 1888; Hebrew Union College of Cincinnati, 1889. *Hebrew, Arabic, and Philosophy.*

JOHN JACOB ROTHERMEL. Lancaster, Pa. 1312 *Park Av.*
A. B., Franklin and Marshall College, 1893, and A. M., 1896. *Physics, Electricity, and Mathematics.*

RICHARD BURTON ROWE. Clarksville, N. Y. 1626 *Bolton St.*
Ph. B., Union College, 1896. *Geology.*

GEORGE WISE RUSSELL. Onancock, Va. 916 *McCulloh St.*
A. B., Randolph-Macon College, 1892, and A. M., 1893. *Chemistry.*

GARNETT RYLAND. Richmond, Va. 1214 *Eutaw Place.*
A. M., Richmond College, 1892. *Chemistry, Physics, and Mathematics.*

CHARLES ALBERT SAVAGE. Baltimore. 2807 *St. Paul St.*
A. B., Johns Hopkins University, 1895. *Greek, Latin, and Sanskrit.*

Rev. TOBIAS SCHANFARBER. Baltimore. 2030 *Madison Av.*
A. B., University of Cincinnati, 1885; Hebrew Union College of Cincinnati, 1886. *Semitic Languages.*

CHARLES CARROLL SCHENCK. Baltimore. 1007 *St. Paul St.*
A. B., Johns Hopkins University, 1893. *Physics, Mathematics, and Chemistry.*

LAURENCE FREDERICK SCHMECKEBIER. Baltimore. 1620 *W. Lexington St.*
A. B., Johns Hopkins University, 1896. *History and Economics.*

JOHN FREDERICK SCHUNCK. Baltimore. 1711 *Jefferson St.*
A. B., Johns Hopkins University, 1897. *History and Politics.*

CHARLES CARRINGTON SCOTT. Fincastle, Va. 803 *W. Fayette St.*
A. B., Hampden-Sidney College, 1888. *Chemistry and Geology.*

JAMES EUSTACE SHAW. Florence, Italy. 1019 *Linden Av.*
A. B., Johns Hopkins University, 1896. *Romance Languages.*

LOUIS SIFF. New York, N. Y. 1028 *McCulloh St.*
S. B., Cornell University, 1897. *Mathematics and Physics.*

WARD WEAVER SIMMONS. Brooklyn, N. Y. 1211 *Madison Av.*
S. B., Brooklyn Polytechnic Institute, 1897. *Chemistry, Physics, and Biology.*

EDWARD SELL SMITH. Warren, O. 1424 *Druid Hill Av.*
A. B., University of Michigan, 1892. *Chemistry, Biology, and Geology.*

ERNEST ASHTON SMITH. Valdosta, Ga. 1019 *Linden Av.*
A. B., Ohio Wesleyan University, 1888, and A. M., 1891. *Economics.*

CHARLES SNAVELY. Massillon, O. 1029 *W. Lanvale St.*
A. B., Otterbein University, 1894. *History, Economics, and Social Science.*

CHARLES WILLIAM SOMMERVILLE. White Post, Va. 2020 *N. Calvert St.*
A. B. and S. B., Hampden-Sidney College, 1890, and A. M., 1896; Union Theological Seminary (Va.), 1895. *History, Politics, and Philosophy.*

SAMUEL HAMILTON SPRAGINS. Baltimore. 2207 *St. Paul St.*
A. B., Johns Hopkins University, 1897. *Latin, Greek, and Sanskrit.*

THOMAS STUART. Edenderry, Ireland. 621 *Dolphin St.*
A. B., Royal University of Ireland, 1895, and A. M., 1896. *Mathematics, Astronomy, and Physics.*

MERVIN TUBMAN SUDLER. Westover. 1006 *Madison Av.*
S. B., Maryland Agricultural College, 1894. *Zoology, Physiology, and Botany.*

JOHN WESLEY RICHARDSON SUMWALT. Baltimore. 529 *S. Charles St.*
A. B., Johns Hopkins University, 1896. *Semitic Languages.*

LEO RICHARD AUGUST SUPPAN. St. Louis, Mo. 1021 *McCulloh St.*
S. B., New Mexico School of Mines, 1896. *Chemistry.*

GEORGE THOMAS SURFACE. Blacksburg, Va. 1214 *Eutaw Place.*
S. B., Virginia Polytechnic Institute, 1895, and M. S., 1896. *Geology, Mineralogy, and Chemistry.*

MORRIS CRATER SUTPHEN. Morristown, N. J. [*Absent.*]
A. B., Princeton University, 1890, and A. M., 1893. *Latin, Greek, and Sanskrit.*

HAROLD JOHN TURNER. Baltimore. 212 *E. Lafayette Av.*
A. B., Johns Hopkins University, 1892. *Chemistry and Geology.*

ELISHA CHISHOLM WALDEN. Cincinnati, O. 1006 *Madison Av.*
A. B., Ohio Wesleyan University, 1892; M. S., University of Cincinnati, 1897. *Zoology, Physiology, and Bacteriology.*

CHARLES LYMAN WARNER. Salisbury, Conn. 837 *W. Fayette St.*
A. B., Williams College, 1891. *Greek and Latin.*

CHARLES ADDISON WASHBURN. Greene, Me.
A. B., Bates College, 1885. *Chemistry and Geology.*

CAMPBELL EASTER WATERS. Baltimore. 13*th St., Walbrook.*
A. B., Johns Hopkins University, 1895. *Chemistry, Mineralogy, and Botany.*

CHARLES CLINTON WEAVER. Greensboro, N. C. 1206½ *McCulloh St.*
A. B., Trinity College (N. C.), 1895. *History, Politics, and Jurisprudence.*

Rev. EDWARD EBENEZER WEAVER. Baltimore. 301 *E. North Av.*
A. B., Wooster University, 1885; Princeton Theological Seminary, 1889; A. M., Princeton University, 1891. *Semitic Languages.*

WILLIAM STONE WEEDON. Baltimore. 1416 *Linden Av.*
S. B., Maryland Agricultural College, 1897. *Chemistry, Mineralogy, and Geology.*

HENRY SKINNER WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1893. *English, History, and Philosophy.*

JAMES BLANTON WHAREY. Mooresville, N. C. 1307 *Linden Av.*
A. B., Davidson College, 1892, and A. M., 1894. *English, German, and French.*

WILLIAM MARION WHITTEN. South Bend, Ind. 1006 *Madison Av.*
S. B., University of Michigan, 1895; M. S., University of Kansas, 1896. *Chemistry and Physics.*

DUDLEY WILLIAMS. Baltimore. 1128 *Cathedral St.*
A. B., Johns Hopkins University, 1897. *Biology, Chemistry, and Physics.*

FRANK DANIEL WILSON. Chatham, Va. 1214 *Eutaw Place.*
S. B., Virginia Polytechnic Institute, 1894, and M. S., 1893. *Chemistry, Mineralogy, and Physics.*

RICHARD HENRY WILSON. Baltimore. 2203 *Beech Av.*
A. B., Johns Hopkins University, 1892. *French, Spanish, and History.*

JAMES HENRY CURRY WINSTON. Farmville, Va. 1024 *Madison Av.*
A. B., and S. B., Hampden-Sidney College, 1894. *Chemistry and Physics.*

FREDERICK BENNETT WRIGHT. Oberlin, O. 1120 *Linden Av.*
S. B., Oberlin College, 1897. *Geology.*

(147)

ATTENDANTS ON SINGLE COURSES OF LECTURES.

History, Economics, and Politics.

Rev. JOHN THOMAS ENSOR. Baltimore Co. *St. Denis P. O.*
A. B., New Windsor College, 1889.

JOHN WORK GARRETT. Baltimore Co. *Govanstown.*
S. B., Princeton University, 1895.

Rev. GEORGE HINES. Baltimore. 1921 *Hollins St.*
Westminster (Md.) Theological Seminary, 1893.

WILLIAM EDWARD SCHLOEGEL. Baltimore. 406 *S. Bond St.*
LL. B., University of Maryland, 1891.

Rev. CHARLES DIEHL TAYLOR. Baltimore. 3925 *Frisby St.*
A. B., Dickinson College, 1896.

Chemistry.

ROBERT MARTIN BRUNS. New Orleans, La. 812 *St. Paul St.*
A. B., University of Virginia, 1896.

Philosophy.

Rev. WILLIAM HENRY OSMOND. Baltimore. 1105 *N. Mount St.*
Virginia Theological Seminary, 1897.

Semitic Languages.

Rev. JOHN R. MAHONEY. Baltimore. *St. Mary's Seminary.*
D. D., Minerva University (Rome), 1887, and Ph. D., 1889.

Rev. JOSEPH V. TRACY. Baltimore. *St. Mary's Seminary.*
A. B., Boston College, 1882.

Romance Languages.

XAVIER TEILLARD. Washington, D. C. *Washington.*
B. ès Lett., University of France, 1873.

Embryology.

JOSE L. HIRSH. Baltimore. 1513 *Madison Av.*
A. B., Johns Hopkins University, 1892; M. D., University of Maryland, 1896.

(11)

MEDICAL STUDENTS.

CANDIDATES FOR THE DEGREE OF M. D.

Fourth Year.

WILLIAM STEVENSON BAER. Baltimore. 24 *N. Broadway.*
A. B., Johns Hopkins University, 1894.

WILLIAM JEPHTHA CALVERT. Lexington, Ky. 422 *N. Broadway.*
A. B., University of Kentucky, 1893; Graduate Student, Kentucky State College, 1893-94.

PATRICK JOSEPH CASSIDY. Norwich, Conn. 1727 *Fairmount Av.*
A. B., Yale University, 1894.

JOHN WILLIAMS COE. Meriden, Conn. 1734 *E. Fayette St.*
Ph. B., Yale University, 1893.

WALTER COX. Bel Alton. 311 *N. Broadway.*
A. B., Johns Hopkins University, 1894.

PERCY MILLARD DAWSON. Montreal, Canada. 1640 *E. Fayette St.*
A. B., Johns Hopkins University, 1894.

ARTHUR WELLS ELTING. Upper Red Hook, N. Y. 412 *N. Broadway.*
A. B., Yale University, 1894.

WILLIAM WEBER FORD. Baltimore. 718 *N. Howard St.*
A. B., Adelbert College, 1893.

THOMAS WOOD HASTINGS. Morristown, N. J. 802 *N. Broadway.*
A. B., Johns Hopkins University, 1894.

ALFRED BIRCH HERRICK. Amsterdam, N. Y. 812 *N. Broadway.*
A. B., Williams College, 1894.

MARY MARGARET SEWALL JOHNSTONE. Newburyport, Mass.
A. B., Smith College, 1894; Harvard Summer School, 1894. 417 *N. Charles St.*

JAMES HALL MASON KNOX, JR. Baltimore. 13 *E. Preston St.*
A. B., Yale University, 1892, and Ph. D., 1894; A. M., Lafayette College, 1896.

MILLARD LANGFELD. Baltimore. 2226 *Eutaw Place.*
A. B., Johns Hopkins University, 1893.

GERTRUDE UNDERHILL LIGHT. Milwaukee, Wis. 417 *N. Charles St.*
S. B., University of Wisconsin, 1894.

FRANK ALLEMONG LUPTON. Auburn, Ala. 527 *N. Wolfe St.*
S. B., Alabama Polytechnic Institute, 1891, and M. S., 1892; Graduate Student, Johns Hopkins University, October to January, 1893-94.

JAMES DANIEL MADISON. Mazomanie, Wis. 1734 *E. Fayette St.*
S. B., University of Wisconsin, 1894.

HARRY TAYLOR MARSHALL. Baltimore. 1209 *St. Paul St.*
A. B., Johns Hopkins University, 1894.

DELIA MARIA O'CONNELL. Marlborough, Mass. 135 *Jackson Place.*
A. B., Vassar College, 1893; Graduate Student, Mass. Institute of Technology, 1893-94.

ROGER GRISWOLD PERKINS. Schenectady, N. Y. 1128 *McCulloh St.*
A. B., Union College, 1893, and Harvard University, 1894.

KATHERINE PORTER. Baltimore. 2100 *N. Calvert St.*
A. B., Bryn Mawr College, 1894.

JOSEPH HERSEY PRATT. North Middleboro, Mass. 1640 *E. Fayette St.*
Ph. B., Yale University, 1894.

GEORGIANA SANDS. Port Chester, N. Y. 887 *Park Av.*
A. B., Vassar College, 1893; Graduate Student, Barnard College (N. Y.), 1893-94.

BENJAMIN ROBINSON SCHENCK. Syracuse, N. Y. 812 *N. Broadway.*
A. B. ,Williams College, 1894.

WALTER RALPH STEINER. Baltimore. 1038 *N. Eutaw St.*
A B., Yale University, 1892, and A. M., 1895; Graduate Student, Johns Hopkins University, 1892-94.

EMMA ELIZABETH WALKER. Parkersburg, W. Va. 417 *N. Charles St.*
A. B., Smith College, 1887.

ANDREW HENDERSON WHITRIDGE. Baltimore. 18 *W. Read St.*
S. B., Harvard University, 1894.

(26)

Third Year.

LAWRASON BROWN. Baltimore. 1318 *W. Lanvale St.*
A. B., Johns Hopkins University, 1896.

EDWARD ERLE BROWNELL. Woodland, Cal. 1005 *N. Charles St.*
Ph. B., Yale University, 1895.

HUMPHREY WARREN BUCKLER. Baltimore. 806 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

RUFUS IVORY COLE. Peru, Ill. 139 *Jackson Place.*
S. B., University of Michigan, 1896.

FRANK CURTIS DAVIS. Minneapolis, Minn. 1005 *N. Charles St.*
A. B., Amherst College, 1895.

JOHN STAIGE DAVIS. Sault Ste Marie, Mich. 1005 *N. Charles St.*
Ph. B., Yale University, 1895.

CHARLES PHILLIPS EMERSON. Methuen, Mass. 103 *Jackson Place.*
A. B., Amherst College, 1894.

BLANCH N. EPLER. Oakland, Cal. 129 *E. North Av.*
S. B., University of California, 1895.

JOSEPH ERLANGER. San Francisco, Cal. 126 *Jackson Place.*
S. B., University of California, 1895.

PHILIP SAFFERY EVANS, JR. Baltimore. 802 *N. Broadway.*
A. B., Yale University, 1895.

RICHARD HOLDEN FOLLIS, JR. San Francisco, Cal. 1005 *N. Charles St.*
Ph. B., Yale University, 1895.

FRANK TAYLOR FULTON. Warsaw, Ill. 1734 *E. Fayette St.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1896.

JAMES DATON GALLAGHER. Steubenville, O. 707 *N. Broadway.*
A. B., Johns Hopkins University, 1895.

HENRY HARRIS. Olympia, Wash. 521 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895.

HENRY JOSEPH HOYE. Providence, R. I. 114 *Jackson Place.*
A. B., Brown University, 1895.

LOUIS WILLIAMS LADD. A. B., Yale University, 1895.	Baltimore.	139 *Jackson Place.*
CHARLES SUMNER LITTLE. A. B., Wabash College, 1894.	Evansville, Ind.	1006 *N. Broadway.*
JOHN ARTHUR LUETSCHER. S. B., University of Wisconsin, 1895.	Sauk City, Wis.	104 *Jackson Place.*
FRANK WORTHINGTON LYNCH. A. B., Adelbert College, 1895.	Cleveland, O.	718 *N. Howard St.*
CHESTER LEA MAGEE. A. B., Leland Stanford Jr. University, 1895, and A. M., 1896.	San Diego, Cal.	519 *N. Wolfe St.*
HUGH MILLER MOORE. S. B. and M. S., Miami University, 1895.	Oxford, O.	1033 *N. Broadway.*
EDWARD SPILLER OLIVER. A. B., Johns Hopkins University, 1895.	Baltimore.	*Mt. Washington.*
CHARLES WILLIAMS OTTLEY. A. B., Princeton University, 1893.	Atlanta, Ga.	1727 *Fairmount Av.*
PAUL OCTAVIUS OWSLEY. Ph. B., Yale University, 1895.	Chicago, Ill.	1005 *N. Charles St.*
JACOB HALL PLEASANTS, JR. A. B., Johns Hopkins University, 1895.	Baltimore.	606 *Cathedral St.*
SYLVAN ROSENHEIM. A. B., Johns Hopkins University, 1895.	Baltimore.	521 *N. Wolfe St.*
JOHN ALBERTSON SAMPSON. A. B., Williams College, 1895.	Troy, N. Y.	103 *Jackson Place.*
HALBERT SEVERIN STEENSLAND. S. B., University of Wisconsin, 1895.	Madison, Wis.	814 *N. Broadway.*
WILLIAM RIDGELY STONE. A. B., Princeton University, 1895.	Washington, D. C.	113 *W. Mulberry St.*
EDGAR RANDOLPH STROBEL. A. B., Johns Hopkins University, 1895.	Baltimore.	37 *E. North Av.*
FREDERICK HERMAN VERHOEFF. Ph. B., Yale University, 1895.	Louisville, Ky.	1707 *Fairmount Av.*
WILLIAM WHITRIDGE WILLIAMS. A. B., Johns Hopkins University, 1895.	Baltimore.	1128 *Cathedral St.*
SARAH DELIA WYCKOFF. S. B., Wellesley College, 1894.	Dayton, O.	1910 *E. Madison St.*
LAWRENCE YATES. Ph. B., Yale University, 1894; S. B., University of Wisconsin, 1895.	Milwaukee, Wis.	1005 *N. Charles St.*

(34)

Second Year.

JOSEPH AKERMAN. A. B., University of Georgia, 1894, and Graduate Student, 1895-96.	Athens, Ga.	1727 *Fairmount Av.*
HERBERT WILLIAMS ALLEN. S. B., University of California, 1895.	Oakland, Cal.	810 *N. Broadway.*
MABEL FLETCHER AUSTIN. S. B., University of Minnesota, 1893.	Minneapolis, Minn.	1819 *E. Townsend St.*

ALMA EMERSON BEALE. Schaghticoke, N. Y. 2520 *E. Baltimore St.*
A. B., Wellesley College, 1891; Marine Biological Laboratory, Wood's Holl, 1893.

MILTON BETTMANN. Cincinnati, O. 812 *N. Broadway.*
A. B., Harvard University, 1897.

EVELYN BRIGGS. Wadsworth, O. 214 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1895.

HERMAN BRÜLLE. Fredericksburg, Va. 1016 *N. Fulton Av.*
A. B. and S. B., Hampden-Sidney College, 1895; Graduate Student, Johns Hopkins University, 1895-96.

CURTIS FIELD BURNAM. Richmond, Ky. 1128 *McCulloh St.*
A. B., Central University (Ky.), 1895; Graduate Student, Johns Hopkins University, 1895-96.

ELEANOR SARAH CHACE. Fall River, Mass. 127 *Jackson Place.*
S. B., Wellesley College, 1894.

ARTHUR SMITH CHITTENDEN. Binghamton, N. Y. 1757 *Jefferson St.*
A. B., Yale University, 1896.

HENRY ASBURY CHRISTIAN. Lynchburg, Va. 804 *N. Broadway.*
A. B. and A. M., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

WILLIAM REMSHART DANCY. Savannah, Ga. 802 *N. Broadway.*
S. B., University of Georgia, 1896.

AUGUSTUS HARTJE EGGERS. Allegheny, Pa. 806 *N. Broadway.*
Ph. B., Yale University, 1896.

HENRY COURTNEY EVANS. Youngstown, O. 718 *N. Howard St.*
A. B., Adelbert College, 1896.

ROSE FAIRBANK. Hatfield, Mass. 313 *N. Broadway.*
A. B., Smith College, 1895.

CLARENCE B. FARRAR. Cattaraugus, N. Y. 413 *N. Charles St.*
A. B., Harvard University, 1896; Harvard Medical School, 1896-97.

ARTHUR LAWRENCE FISHER. San Francisco, Cal. 126 *Jackson Place.*
S. B., University of California, 1896.

WILLIAM ALEXANDER FISHER, JR. Baltimore. 905 *Cathedral St.*
A. B., Princeton University, 1896.

HOWARD FLETCHER. Warrenton, Va. 1757 *Jefferson St.*
A. B., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

JOSEPH MARSHALL FLINT. Chicago, Ill. *Govanstown.*
S. B., University of Chicago, 1895.

WILLIAM PATRICK HEALY. Bridgeport, Conn. 810 *N. Broadway.*
Ph. B., Yale University, 1896.

WILLIAM FAITHFUL HENDRICKSON. Baltimore. 236 *N. Carey St.*
A. B., Johns Hopkins University, 1896.

ALBION WALTER HEWLETT. San Mateo, Cal. 938 *N. Broadway.*
S. B., University of California, 1895; Cooper Medical College, 1895-97; University of Chicago, Summer of 1897.

WILLIAM CRISSEY KELLOGG. New Canaan, Conn. 806 *N. Broadway.*
A. B., Yale University, 1896.

PRESTON KYES. North Jay, Me. 813 *N. Broadway.*
A. B., Bowdoin College, 1896.

WARREN HARMON LEWIS. Oak Park, Ill. 116 *Jackson Place.*
S. B., University of Michigan, 1894, and Graduate Student, 1894-96.

HARRY WILSON LITTLE. Evansville, Ind. 1006 *N. Broadway.*
S. B., Wabash College, 1896.

ELLEN LOUISE LOWELL. Calais, Me. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896.

JOHN BRUCE MACCALLUM. Dunnville, Ont. 132 *Jackson Place.*
A. B., University of Toronto, 1896.

MARY WILBUR MARVELL. Fall River, Mass. 127 *Jackson Place.*
S. B., Wellesley College, 1894.

CLARA R. MELTZER. New York City. 801 *N. Broadway.*
A. B., Barnard College, Columbia University, 1896.

CLELIA DUEL MOSHER. Stanford Univ., Cal. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1893, and A. M., 1894.

HANNAH GLIDDEN MYRICK. Dorchester, Mass. 129 *Jackson Place.*
A. B., Smith College, 1896.

ANNA ODELL. Detroit, Mich. 801 *N. Broadway.*
A. B., Vassar College, 1896.

RICHARD FOSTER RAND. Meriden, Conn. 1707 *Fairmount Av.*
Ph. B., Yale University, 1895, and Graduate Student, 1895–96.

DOROTHY M. REED. Leyden, N. Y. 1819 *E. Townsend St.*
B. L., Smith College, 1895; Graduate Student, Mass. Institute of Technology, 1895–96.

GLANVILLE YEISLEY RUSK. Baltimore. 2000 *E. Baltimore St.*
A. B., Johns Hopkins University, 1896.

FLORENCE RENA SABIN. Denver, Colo. 129 *Jackson Place.*
S. B., Smith College, 1893, and Assistant in Zoology, 1895–96.

WILLIAM FRANCIS MATTINGLY SOWERS. Washington, D. C.
A. B., Princeton University, 1896. 515 *Cathedral St.*

ELLEN APPLETON STONE. Providence, R. I. 122 *Jackson Place.*
A. B., Radcliffe College, Harvard University, 1895; A. M., Brown University, 1896.

LAWRENCE HANTHORN THAYER. Lima, O. 1016 *N. Broadway.*
A. B., Denison University, 1895.

MORTIMER WARREN. Cumberland Mills, Me. 813 *N. Broadway.*
A. B., Bowdoin College, 1896.

JOHN MONTGOMERY WEST. Baltimore. 2419 *Maryland Av.*
A. B., Johns Hopkins University, 1896.

PAUL GERHARDT WOOLLEY. Chicago, Ill. 1421 *McCulloh St.*
S. B., University of Chicago, 1896.

(44)

First Year.

HERMANN MORRIS ADLER. New York City. 700 *N. Broadway.*
A. B., Harvard University, 1897.

ALEXANDER MONTAGUE ATHERTON. Honolulu, H. I. 122 *Jackson Place.*
A. B., Wesleyan University (Conn.), 1897.

FREDERICK HARRY BAETJER. Winchester, Va. 615 *Park Av.*
A. B., Johns Hopkins University, 1897.

WILLIAM DWIGHT BALDWIN. Haiku, H. I. 1757 *Jefferson St.*
A. B., Yale University, 1897.

JOHN MCWILLIAMS BERRY. Peterboro, N. Y. 700 *N. Broadway.*
S. B., Cornell University, 1897.

HORACE DECHAMPS BLOOMBERGH. Easton, Pa. 122 *Jackson Place.*
A. B., Lafayette College, 1897.

JOHN ROBERT BOSLEY. Baltimore. 1607 *Park Av.*
A. B., Western Maryland College, 1896; Graduate Student, Johns Hopkins University, 1896-97.

CHARLES HENRY BUNTING. La Crosse, Wis. 116 *Jackson Place.*
S. B., University of Wisconsin, 1896, and Graduate Student, 1896-97.

JOEL IVES BUTLER. Meriden, Conn. 112 *Jackson Place.*
Ph. B., Yale University, 1897.

HARRY WARDELL CAREY. Stamford, Conn. 432 *N. Broadway.*
A. B., Yale University, 1897.

WILLIAM MACK CHOWNING. Rock Island, Ill. 116 *Jackson Place.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1896.

ROBERT THORNTON COMER. James, Ala. 214 *N. Broadway.*
A. B., University of Alabama, 1896; Graduate Student, Johns Hopkins University, 1896-97.

ELIZABETH COMSTOCK. Baltimore. 2310 *Fairmount Av.*
S. B., University of Wisconsin, 1897.

GUY LEARTUS CONNOR. Detroit, Mich. 700 *N. Broadway.*
A. B., Williams College, 1897.

RAY CONNOR. Detroit, Mich. 700 *N. Broadway.*
A. B., Williams College, 1897.

GEORGE SILAS DRAKE, JR. St. Louis, Mo. 432 *N. Broadway.*
A. B., Yale University, 1897.

ADELAIDE DUTCHER. Madison, Wis. 1909 *Jefferson St.*
S. B., University of Wisconsin, 1897.

HARRY ATWOOD FOWLER. La Crosse, Wis. 1014 *N. Broadway.*
S. B., University of Minnesota, 1896; University of Chicago, Summer term, 1896.

FREDERICK PARKER GAY. Boston, Mass. 1005 *N. Charles St.*
A. B., Harvard University, 1897.

JOHN BAPTISTE GHIO. St. Louis, Mo. 1024 *N. Broadway.*
A. B., Christian Brothers' College (St. Louis), 1896; Graduate Student, Johns Hopkins University, 1896-97.

NEIL DUNCAN GRAHAM. Falls Church, Va. 602 *N. Charles St.*
A. B., Johns Hopkins University, 1897.

GARDNER WELLS HALL. Newton, Mass. 1005 *N. Charles St.*
Harvard University.†

LOUIS VIRGIL HAMMAN. Baltimore. 2500 *Madison Av.*
A. B., Rock Hill College, 1896; Graduate Student, Johns Hopkins University, 1896-97.

ROLLAND FREDERICK HASTREITER. Madison, Wis. 104 *Jackson Place.*
S. B., University of Wisconsin, 1897.

JOSEPH HENRY HATHAWAY. Grinnell, Iowa. 122 *Jackson Place.*
A. B., Iowa College, 1894; A. B., Harvard University, 1896, and A. M., 1897.

JAMES MORLEY HITZROT. McKeesport, Pa. *Govanstown.*
A. B., Princeton University, 1897.

GERRY ROUNDS HOLDEN. Portland, Me. 432 *N. Broadway.*
A. B., Yale University, 1897.

† All the courses required for the degree of A. B. in Harvard University have been completed by Mr. Hall. The diploma will be granted in June, 1898.

EDWARD HICKS HUME. Bombay, India. 1757 *Jefferson St.*
A. B., Yale University, 1897.

WILLIAM BERNARD JOHNSTON. Washington, D. C. 1005 *N. Charles St.*
A. B., Harvard University, 1897.

BURT BRONSON KAUFFMAN. St. Louis, Mo. 112 *Jackson Place.*
A. B., Yale University, 1897.

HARRY M. KAUFMAN. Washington, D. C. *Washington.*
A. B., Johns Hopkins University, 1897.

ARTHUR HERBERT KIMBALL. Washington, D. C. *Washington.*
S. B., Amherst College, 1897.

THEODORE LAMSON. Hartford, Conn. 112 *Jackson Place.*
Ph. B., Yale University, 1897.

DWIGHT MILTON LEWIS. New Haven, Conn. 214 *N. Broadway.*
A. B., Yale University, 1897.

MARGARET LONG. Hingham, Mass. 1819 *E. Townsend St.*
A. B., Smith College, 1895; Student, Massachusetts Institute of Technology, 1896–97.

WARFIELD THEOBALD LONGCOPE. Baltimore. 136 *Richmond St.*
A. B., Johns Hopkins University, 1897.

ANNA GALLOWAY LYLE. San Francisco, Cal. 213 *W. Monument St.*
A. B., Leland Stanford Jr. University, 1895.

WILLIAM HARVEY MADDREN. Brooklyn, N. Y. 1024 *N. Broadway.*
S. B., Brooklyn Polytechnic Institute, 1896; Graduate Student, Johns Hopkins University 1896–97.

WILFRED HAMILTON MANWARING. Ann Arbor, Mich.
S. B., University of Michigan, 1895. 26 *E. Mt. Vernon Place.*

EDWARD PATRICK MCKEOUGH. Hartford, Conn. 214 *N. Broadway.*
S. B., Villanova College (Pa.), 1894, and A. B., 1896; Graduate Student, Johns Hopkins University, 1896–97.

ELIZABETH SUTTON MOORE. Brookville, Pa. 118 *Jackson Place.*
S. B., Wilson College (Pa.), 1895; Graduate Student, Cornell University, 1896–97.

HENRY PICKERING PARKER. Howard County. *St. Denis P. O.*
A. B., Johns Hopkins University, 1896.

FRANCES KENNEY PULLEN. Paris, Ky. 118 *Jackson Place.*
A. B., Wellesley College, 1896.

MAURICE J. RUBEL. Chicago, Ill. 100 *Jackson Place.*
S. B., University of Chicago, 1897.

STEPHEN RUSHMORE. Plainfield, N. J. 1113 *Madison Av.*
A. B., Amherst College, 1897.

RAYMOND JOHN RUSS. Oakland, Cal. 938 *N. Broadway.*
S. B., University of California, 1896.

JOHN CLEVELAND SALTER. Carbondale, Ill. 432 *N. Broadway.*
A. B., Yale University, 1897.

MABEL PALMER SIMIS. Vail's Gate, N. Y. 1819 *E. Townsend St.*
S. B., Cornell University, 1897.

JOSIAH MORRIS SLEMONS. Salisbury. 1024 *N. Broadway.*
A. B., Johns Hopkins University, 1897.

HERBERT MELOY SMITH. Salem, Va. 1014 *N. Broadway.*
A. B., Roanoke College, 1892, and A. M., 1897; Student, Johns Hopkins University, 1894–95.

CHARLES NELSON SPRATT. Minneapolis, Minn. 821 *N. Broadway.*
S. B., University of Minnesota, 1897.

GERTRUDE STEIN. Baltimore. 215 *E. Biddle St.*
Radcliffe College, Harvard University. †

ALBERT LOUIS STEINFELD. Baltimore. 318 *N. Carey St.*
A. B., Johns Hopkins University, 1897.

CARLOTTA MARY SWETT. Bangor, Me. 118 *Jackson Place.*
A. B., Wellesley College, 1896; Student, Maine State College, Summer of 1896.

HENRY LUDWIG ULRICH. Newark, N. J. 806 *N. Broadway.*
S. B., Rutgers College, 1897.

ALBERT JAMES UNDERHILL. Baltimore. *Walbrook.*
A. B., Johns Hopkins University, 1897.

MARION BARTHOLOW WALKER. North Hatley, Canada.
Radcliffe College, Harvard University. † 122 *Jackson Place.*

LOUIS MARSHALL WARFIELD. Savannah, Ga. 819 *Park Av.*
A. B., Johns Hopkins University, 1897.

GEORGE WILLIAM WARREN. Portland, Me. 1024 *N. Broadway.*
A. B., Johns Hopkins University, 1897.

STEPHEN HURT WATTS. Lynchburg, Va. 804 *N. Broadway.*
A. M., Randolph-Macon College, 1896; Student, University of Virginia, 1896-97.

ERNEST ALDEN WELLS. Hartford, Conn. 527 *N. Wolfe St.*
A. B., Yale University, 1897.

MABEL WELLS. Monticello, Ark. 118 *Jackson Place.*
A. B., Wellesley College, 1896; Student, University of Zürich, 1897.

CHARLES KNICKERBACKER WINNE, JR. Baltimore. *Fort McHenry.*
A. B., Johns Hopkins University, 1897.

(63)

PHYSICIANS ATTENDING SPECIAL COURSES.

EDITH A. BARKER. Philadelphia, Pa.
M. D., Woman's Medical College (Phila.), 1897. *Special Research.*

AUGUSTUS C. BEHLE. Salt Lake City, Utah. 1019 *N. Broadway.*
M. D., Rush Medical College, 1894. *Special Research.*

JAMES B. BENNETT. Baltimore. 23 *S. Broadway.*
M. D., Baltimore Medical College, 1889. *Normal Histology.*

FRANCES A. CARPENTER. St. John, N. B. 115 *W. Barre St.*
M. D., Woman's Medical College (Phila.), 1896. *Pathology.*

WILLIAM FITCH CHENEY. San Francisco, Cal. 1640 *E. Fayette St.*
M. D., Cooper Medical College, 1889. *Normal Histology.*

CLARIBEL CONE. Baltimore. 1607 *Eutaw Place.*
M. D., Woman's Medical College (Balt.), 1890. *Special Research.*

MALCOLM L. CURRIE. Ailey, Ga. 722 *N. Broadway.*
M. D., College of Physicians and Surgeons (Balt.), 1888. *Gynecology.*

HARRY O. FAIRWEATHER. Troy, N. Y. 132 *Jackson Place.*
M. D., Albany Medical College, 1896. *Normal Histology.*

THOMAS FEARN. Mobile, Ala. 13 *W. Preston St.*
M. D., University of Maryland, 1890. *Special Research.*

† All the courses required for the degree of A. B. in Radcliffe College have been completed by Miss Stein and Miss Walker. The diplomas will be granted in June, 1898.

MURRAY S. HITCHCOCK. Brookwood, Ala. *Hotel Broadway.*
M. D., Louisville Medical College, 1893. *Normal Histology.*

CAROLINE WORMLEY LATIMER. Howard County. 517 *Cathedral St.*
M. D., Woman's Medical College (Balt.), 1890; A. B. and A. M., Bryn Mawr College, 1896. *Special Research.*

LUCIEN P. MCCALLA. Salt Lake City, Utah. 1019 *N. Broadway.*
M. D., Missouri Medical College, 1888. *Pathology and Bacteriology.*

GEORGE K. MCDOWELL. Staples, Minn. 600 *N. Broadway.*
M. D., Trinity University (Toronto), 1892. *Normal Histology.*

JOHN D. MURRAY. Baltimore County. *St. Denis P. O.*
M. D., College of Physicians and Surgeons (N. Y.), 1893. *Pathology.*

BEATTIE NESBITT. Toronto, Ont. 213 *W. Monument St.*
M. D., Trinity University (Toronto), 1887. *Special Research.*

WILLIAM R. D. SUTHERLAND. Winnepeg, Canada. 600 *N. Broadway.*
M. D., Victoria University, 1880. *Normal Histology.*

MARLBOROUGH C. WYETH. U. S. Army. 1711 *St. Paul St.*
M. D., College of Physicians and Surgeons (N. Y.), 1878. *Pathology and Bacteriology.*
(17)

PHYSICIANS ATTENDING SPECIAL COURSES, MAY–JUNE, 1897.

[Not enrolled in the Register for 1896–97.]

CALEB NOBLE ATHEY. Baltimore.
M. D., University of Maryland, 1894. *Pathology.*

WILLIAM J. BAIRD. Boulder, Colo.
M. D., University of Maryland, 1881. *Pathology, Bacteriology, and Clinical Microscopy.*

JEFFRIES BUCK. Baltimore.
M. D., University of Pennsylvania, 1895. *Clinical Microscopy.*

THOMAS H. BUCKLER. Baltimore.
A. B., Johns Hopkins, 1886; M. D., Univ. of Maryland, 1888. *Clinical Microscopy.*

MARION BURKE. New York City.
M. D., Woman's Medical College (N. Y.), 1895. *Medicine and Clinical Microscopy.*

ALBERT G. CARR. Durham, N. C.
M. D., Bellevue Hospital Medical College, 1870. *Medicine and Surgery.*

WILLIAM FITZHUGH CARTER. U. S. Army.
M. D., University of Virginia, 1872. *Bacteriology and Clinical Microscopy.*

GEORGE F. COMSTOCK. Saratoga Springs, N. Y.
M. D., College of Physicians and Surgeons (N. Y.), 1883. *Medicine, Surgery, Gynecology, Special Depts., and Clinical Microscopy.*

FREDERICK DOBYNS. Baltimore.
M. D., University of Maryland, 1897. *Pathology and Bacteriology.*

JOHN L. DRYER. Santa Ana, Cal.
M. D., Cincinnati College of Medicine and Surgery, 1877. *Gynecology.*

JAMES HENRY DUGGAN. Stevensville, Ga.
M. D., Southern Medical College (Ga.), 1884. *Medicine and Gynecology.*

THOMAS FEARN. Mobile, Ala.
M. D., University of Maryland, 1890. *Clinical Microscopy.*

HENRY M. FITZHUGH, JR. Baltimore.
M. D., University of Maryland, 1897. *Clinical Microscopy.*

CHARLES R. FOUTZ. Westminster.
M. D., University of Maryland, 1897. *Clinical Microscopy.*

WILLIAM H. GEORGE. Albany, N. Y.
M. D., Albany Medical College, 1894. *Medicine, Surgery, Gynecology, Pathology, and Clinical Microscopy.*

PAUL GILLESPIE. Cincinnati, O.
M. D., Miami Medical College, 1897. *Pathology and Clinical Microscopy.*

SAMUEL B. GRIMES. Baltimore.
M. D., University of Maryland, 1897. *Clinical Microscopy.*

WILLIAM EDWARD HAMLIN. Waltham, Mass.
M. D., Baltimore Medical College, 1897. *General Medicine.*

LURTY N. HARRIS. Harrisonburg, Va.
M. D., University of Maryland, 1897. *Pathology.*

NORMAN MACL. HARRIS. Toronto, Ont.
M. B., University of Toronto, 1894. *Bacteriology.*

GEORGE DOUGLAS HEAD. Minneapolis, Minn.
M. D., University of Maryland, 1895. *General Medicine and Clinical Microscopy.*

JANE L. HEARTZ. Chicago, Ill.
M. D., Woman's Medical College (N. Y.), 1893. *Medicine and Clinical Microscopy.*

ARTHUR P. HERRING. Baltimore.
M. D., Baltimore Medical College, 1895. *Pathology.*

G. CHAPIN JENKINS. Germantown, Pa.
M. D., Hahnemann Medical College, 1896. *Medicine and Pathology.*

WILLIAM D. KELLY. St. Paul, Minn.
M. D., Jefferson Medical College, 1887. *Gynecology, Pathology, and Clinical Microscopy.*

ALONZO F. KRAMPS. Chicago, Ill.
M. D., Rush Medical College, 1895. *Pathology, Bacteriology, and Clinical Microscopy.*

FREDERICK LAMBACH. Le Claire, Iowa.
M. D., University of Pennsylvania, 1887. *Gynecology, Pathology, Bacteriology, and Clinical Microscopy.*

WILLIAM R. LAVENDER. Omaha, Neb.
M. D., Omaha Medical College, 1890. *Pathology, Bacteriology, and Clinical Microscopy.*

L. LAWRASON. Dundas, Ont.
M. B., University of Toronto, 1895. *Medicine, Surgery, and Gynecology.*

HARRIS R. LECRONE. York, Pa.
M. D., Jefferson Medical College, 1885. *Pathology, Bacteriology, and Clinical Microscopy.*

JOHN C. LYNCH. Bridgeport, Conn.
M. D., New York University, 1886. *Medicine, Surgery, Gynecology, Special Depts., Pathology, and Clinical Microscopy.*

JOHN M. MANNING. Durham, N. C.
M. D., Bellevue Hospital Medical College, 1882. *General Medicine and Surgery.*

WILLIAM MATHEWS. Philadelphia, Pa.
M. D., University of Maryland, 1897. *Bacteriology.*

LOUIS A. MERRITT. Pittsfield, Me.
M. D., Bowdoin Medical College, 1893. *Gynecology.*

WILLIAM G. MILLER. New Castle, Pa.
Bacteriology and Clinical Microscopy.

F. ALAN G. MURRAY. Lee, Mass.
M. D., University of Maryland, 1897. *Clinical Microscopy.*

LEONARD E. NEALE. Baltimore.
M. D., University of Maryland, 1881. *Bacteriology.*

EDWARD LAWRENCE PATTERSON. Barnwell, S. C.
M. D., Georgia Medical College, 1887. *Medicine, Surgery, Gynecology, Special Depts., and Clinical Microscopy.*

OLIVER PARKER PENNING. Havre de Grace.
M. D., University of Maryland, 1897. *Clinical Microscopy.*

HARRY L. PURDY. New York, N. Y.
M. D., College of Physicians and Surgeons (N. Y.), 1890. *Surgery and Gynecology.*

JOHN B. ROBERTS. Philadelphia, Pa.
M. D., Jefferson Medical College, 1874, and University of Pennsylvania, 1888. *Pathology and Bacteriology.*

FRANCIS L. ROGER. Baltimore.
M. D., Baltimore Medical College, 1896. *Pathology, Bacteriology, and Clinical Microscopy.*

VICTOR M. ROMAN. Philadelphia, Pa.
M. D., Hahnemann Medical College, 1896. *Medicine and Pathology.*

JOHN W. SAWYER. Monmouth, Me.
M. D., Bowdoin Medical College, 1894. *Gynecology.*

JOHN B. SCHWATKA. Baltimore.
M. D., University of Maryland, 1883. *Pathology.*

CHARLES L. SCOTT. Sanford, N. C.
M. D., University of Maryland, 1897. *Bacteriology.*

GEORGE E. SENKLER. St. Paul, Minn.
M. D., University of Minnesota, 1892, and University of Pennsylvania, 1893. *Medicine, Pathology, and Clinical Microscopy.*

CHARLES D. STEENKEN. Baltimore.
A. B., Johns Hopkins University, 1892; M. D., College of Physicians and Surgeons (N. Y.), 1896. *Medicine, Surgery, Gynecology, and Special Depts.*

GEORGE H. STOVER. Denver, Colo.
M. D., University of Denver, 1893. *Medicine, Pathology, and Clinical Microscopy.*

GUSTAV C. THIEME. Baltimore.
M. D., College of Physicians and Surgeons (Balt.), 1896. *Surgery.*

HAROTUNE H. THOMAYAN. Asia Minor.
M. D., College of Physicians and Surgeons (Balt.), 1897. *Bacteriology and Clinical Microscopy.*

AMOS W. THOMPSON. Saratoga Springs, N. Y.
M. D., New York University, 1887. *Medicine, Surgery, Gynecology, Special Depts., and Clinical Microscopy.*

JULIA TOLMAN. Arlington, Mass.
M. D., University of Michigan, 1884. *Medicine and Diseases of Nervous System.*

V. L. TUPPER. Bay City, Mich.
M. D., Jefferson Medical College, 1896. *Medicine.*

MILES J. WALKER. Yorkville, S. C.
M. D., Louisville Medical College, 1879. *Bacteriology and Clinical Microscopy.*

ARTHUR WEGEFARTH. Baltimore.
M. D., Baltimore Medical College, 1890. *General Medicine.*

H. BROOKMAN WILKINSON. Tuscaloosa, Ala.
M. D., University of Virginia, 1894. *Medicine, Gynecology, Bacteriology, and Clinical Microscopy.*

PIERRE WILSON. Denison, Texas.
M. D., Missouri Medical College, 1884. *Pathology, Bacteriology, and Clinical Microscopy.*

(56)

UNDERGRADUATE STUDENTS.

MATRICULATES.

JAMES ROBERT CHARLTON ARMSTRONG. Baltimore. 2430 *Madison Av.*
Mr. C. Maupin, Instructor. *Group IV.*

HOWARD BAETJER. Baltimore. 1004 *W. Lanvale St.*
Baltimore City College. *Group II.*

ZADOK MARSHALL BALLARD. Baltimore. 114 *W. Mulberry St.*
Calvert Hall College. *Group III.*

CHRISTIAN JOHN BEEUWKES. Baltimore. 2005 *Druid Hill Av.*
Baltimore City College. *Group VI.*

ODIN BALTIMORE BESTOR. Baltimore. 732 *W. North Av.*
McDonogh School. *Group II.*

HENRY BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Group I.*

BYRON NOBLE BOUCHELLE. Chesapeake City. 1104 *McCulloh St.*
St. John's College. *Group III.*

AUSTIN ADAMS BREED. Cincinnati, O. 8 *W. Preston St.*
Franklin School. *Group III.*

DUNCAN KENNER BRENT. Baltimore. 816 *St. Paul St.*
Mr. Marston's School. *Group VI.*

CHARLES EDWARD BROOKS. Baltimore County. *Lake Roland.*
Mr. Marston's School. *Group II.*

BENNET BERNARD BROWNE, JR. Baltimore. 510 *Park Av.*
Mr. C. Maupin, Instructor. *Group III.*

JAMES LUTHER ALBERT BURRELL. Baltimore. 2024 *Maryland Av.*
Mr. Marston's School. *Group I.*

LYTTLETON MORGAN CHAMBERS. Baltimore. 317 *Falls Road, Hampden.*
Baltimore City College. *Group I.*

CHRISTOPHER THOMPSON CLARK. Washington, D. C. *Washington.*
Dr. Deichmann's School. *Group VI.*

GEORGE MILTENBERGER CLARKE. Baltimore. 206 *Laurens St.*
Mr. Carey's School. *Group VI.*

FRANK JACLARD CLUNET. Baltimore. 815 *N. Howard St.*
Mr. C. Maupin. *Group VII.*

HENRY WIREMAN COOK. Baltimore. 7 *E. Biddle St.*
Mr. Marston's School. *Group III.*

GEORGE DIUGUID DAVIDSON. Baltimore. 2202 *Beech Av.*
Dr. Deichmann's School. *Group VII.*

MCQUILKIN DE GRANGE. Frederick. 1031 *Myrtle Av.*
Frederick College. *Group VI.*

ALBERT CHARLES DIEFFENBACH. Baltimore. 318 *E. Lafayette Av.*
Dr. Deichmann's School. *Group VI.*

GUSTAVUS CHARLES DOHME. Baltimore. 1527 *N. Caroline St.*
Baltimore City College, 1896. *Group III.*

HENRY CARTER DOWNES. Baltimore City College, 1896. *Group VI.*	Baltimore.	1527 *Park Av.*
RALPH DUFFY. Mr. C. Maupin, Instructor. *Group III.*	Baltimore.	1610 *Park Av.*
JOHN HOWARD EAGER, JR. Mr. Lamb's School. *Group I.*	Baltimore.	*Roland Park.*
JAMES F. FERGUSON. Mr. Marston's School. *Group II.*	Baltimore.	873 *Park Av.*
JOHN SOMERVILLE FISCHER. The Carey School. *Group IV.*	Baltimore.	9 *E. Biddle St.*
FERDINAND COLQUHOUN FISHER. Dr. Deichmann's School. *Group I.*	Baltimore.	746 *W. North Av.*
THOMAS FITZGERALD, JR. Mr. Marston's School. *Group II.*	Baltimore.	1904 *Madison Av.*
WALTER MELVIN FOOKS. Mr. Lamb's School. *Group VI.*	Baltimore.	1519 *E. Baltimore St.*
EDDY BURKE FOSNOCHT. Wilmington Conference Academy. *Group VII.*	Baltimore.	342 *W. Biddle St.*
FREDERICK FOSTER. Mr. Marston's School. *Group II.*	Baltimore.	2301 *N. Charles St.*
LAWRENCE HALL FOWLER. Mr. Marston's School. *Group II.*	Catonsville.	*The Albion.*
ISAAC HATHAWAY FRANCIS, JR. Baltimore City College, 1897. *Group II.*	Baltimore County.	*St. Denis P. O.*
WILLIAM WILLOUGHBY FRANCIS. Trinity College School (Ontario). *Group III.*	Toronto, Ont.	1 *W. Franklin St.*
SIMON WALTER FRANK. Private Instruction. *Group VI.*	Baltimore.	1506 *Eutaw Place.*
JOHN CALVIN FRENCH. Dr. Deichmann's School. *Group I.*	Baltimore.	1505 *W. Lombard St.*
CHARLES CARTER GADDESS. Mr. Lamb's School. *Group VI.*	Baltimore.	810 *N. Calvert St.*
JOHN REED GEMMILL. York Collegiate Institute. *Group VI.*	York, Pa.	849 *N. Eutaw St.*
ALEXANDER GORDON, JR. Mr. Marston's School. *Group VI.*	Baltimore.	1216 *St. Paul St.*
HARRY SELIGER GREENBAUM. Baltimore City College, 1896. *Group III.*	Baltimore.	1614 *Eutaw Place.*
JOHN WHEELER GRIFFIN. Mr. Marston's School. *Group I.*	Baltimore.	1027 *N. Calvert St.*
ROBERT HAROLD GRIMES. Mr. Marston's School. *Group VI.*	Baltimore.	2100 *Maryland Av.*
CLARENCE MAURICE GUGGENHEIMER. Mr. Marston's School. *Group VI.*	Baltimore.	1704 *Madison Av.*
WILLIAM BROWNE HAMMOND, JR. Dr. Deichmann's School. *Group VI.*	Baltimore.	1516 *E. Biddle St.*

HUGH SISSON HANNA. Mr. Lamb's School. *Group VI.*	Baltimore.	1037 *Harlem Av.*
PHILIP WARNER HARRY. Georgetown College (Ky.). *Group I.*	Pylesville.	412 *St. Paul St.*
STUART HEYMAN. Mr. Marston's School. *Group VI.*	Baltimore.	928 *W. North Av.*
HARRY DICKINSON HILL. Mr. Lamb's School. *Group VII.*	Baltimore.	807 *N. Arlington Av.*
JOHN PHILIP HILL. Mr. Marston's School. *Group VI.*	Baltimore.	2120 *N. Charles St.*
LEONARD KEENE HIRSHBERG. Private Instruction. *Group III.*	Baltimore.	581 *N. Gay St.*
CONWAY SHALER HODGES. Dr. Deichmann's School. *Group I.*	Baltimore.	24 *W. Saratoga St.*
WILLIAM RANDLE HUBNER. Dr. Deichmann's School. *Group VI.*	Catonsville.	*Catonsville.*
EDWARD PECHIN HYDE. Baltimore City College, 1897. *Group II.*	Baltimore.	1100 *E. North Av.*
ANDREW DICKSON JONES, JR. Dr. Deichmann's School. *Group VI.*	Baltimore.	1208 *St. Paul St.*
TALBOT DICKSON JONES. Private Instruction. *Group VI.*	Baltimore County.	*Relay.*
ROBERT HENRY JONES. Dr. Deichmann's School. *Group I.*	Fairmount.	1006 *Madison Av.*
LEON LEWIS JOYNER. Baltimore City College, 1896. *Group VI.*	Baltimore.	1521 *Edmondson Av.*
KARL JUNGBLUTH, JR. Mr. A. Flexner, Instructor. *Group VI.*	Louisville, Ky.	1002 *Cathedral St.*
CHARLES WESLEY KALB. Dr. Deichmann's School. *Group VI.*	Catonsville.	*Catonsville.*
JOHN ALBERT KALB. Maryland Normal School. *Group V.*	Catonsville.	*Catonsville.*
ALBERT KEIDEL. Mr. Marston's School. *Group III.*	Catonsville.	*Catonsville.*
JAMES ALFRED KENNARD. The Carey School. *Group VI.*	Baltimore.	137 *W. Mt. Royal Av.*
JOHN HENDRICKEN KING. Mr. Marston's School. *Group I.*	Baltimore.	1529 *Bolton St.*
WALTER MARSHALL KRAGER. Baltimore City College, 1896. *Group VI.*	Baltimore.	*The Condon.*
HERMAN KURRELMEYER. Baltimore City College, 1896. *Group VII.*	Baltimore.	512 *N. Carrollton Av.*
LOUIS CHARLES LEHR. Mr. C. Maupin, Instructor. *Group III.*	Baltimore.	12 *E. Chase St.*
DONALD MACY LIDDELL. Denver High School, 1897. *Group IV.*	Denver, Colo.	902 *Madison Av.*
NORVIN RUDOLF LINDHEIM. Mr. Marston's School. *Group VI.*	Greensboro, N. C.	1704 *Madison Av.*

HENRY JOHN LUCKE.	Baltimore.	519 *N. Carey St.*
Baltimore City College, 1895. *Group II.*		
LEONARD LEOPOLD MACKALL.	Baltimore.	809 *Cathedral St.*
Lawrenceville School. *Group II.*		
T. HARTLEY MARSHALL.	Pikesville.	*Pikesville.*
Mr. Marston's School. *Group VI.*		
DAVID GREGG MCINTOSH, JR.	Towson.	*Towson.*
Mr. Marston's School. *Group VI.*		
FRANK OLDHAM MILLER.	Baltimore.	709 *W. Lombard St.*
Dr. Deichmann's School. *Group VII.*		
RAYMOND DURBIN MILLER.	Catonsville.	*Catonsville.*
Baltimore City College, 1895. *Group I.*		
JARED SPARKS MOORE.	Baltimore.	1303 *N. Calvert St.*
Mr. Marston's School. *Group VI.*		
PHILIP SIDNEY MORGAN.	Baltimore.	*Walbrook.*
William Penn Charter School (Phila.). *Group III.*		
JAMES MORFIT MULLEN.	Baltimore.	977 *Park Av.*
Mr. Marston's School. *Group VI.*		
PHILIP AUSTEN MURKLAND.	Baltimore.	502 *Cathedral St.*
Dr. Deichmann's School. *Group I.*		
SOLOMON BRENNER MYERS.	Baltimore.	1532 *Mt. Royal Av.*
Mr. Marston's School. *Group III.*		
JOHN HOWARD PALMER.	Baltimore.	*Roland Park.*
Dr. Deichmann's School. *Group VII.*		
HAROLD PENDER.	Baltimore.	1804 *Bolton St.*
McDonogh School. *Group II.*		
THOMAS LINDLEY PYLE.	Pylesville.	304 *W. Madison St.*
Private Instruction. *Group I.*		
ROBERT LEE RAMSAY.	Baltimore County.	*Wetheredville.*
Davidson College. *Group I.*		
CHARLES MALLORY REMSEN.	Baltimore.	12 *E. Biddle St.*
Mr. Marston's School. *Group IV.*		
VINCENT ADAMS RENOUF.	Baltimore.	416 *W. Hoffman St.*
Max-Gymnasium, Munich. *Group III.*		
LAWRENCE ANTON REYMANN.	Wheeling, W. Va.	201 *W. Madison St.*
Linsley Institute (Wheeling). *Group VI.*		
EDWARD AYRAULT ROBINSON, JR.	Baltimore.	*Mt. Washington.*
Mr. Marston's School. *Group VI.*		
GEORGE CANBY ROBINSON.	Baltimore.	*Mt. Washington.*
Mr. Marston's School. *Group III.*		
WILLIAM LEAVELL ROSS.	Hedgesville, W. Va.	424 *N. Greene St.*
Private Instruction. *Group I.*		
ROBERT BRUCE ROULSTON.	Baltimore.	628 *N. Arlington Av.*
Baltimore City College, 1897. *Group V.*		
FRANK PEYTON ROUS.	Baltimore.	252 *W. Hoffman St.*
Private Instruction. *Group III.*		
JAMES EDWARD ROUTH.	Petersburg, Va.	1225 *Linden Av.*
Private Instruction. *Group II.*		

ALEX. VANRENSSELAER SCHERMERHORN. Baltimore. 632 *W. North Av.*
Private Instruction. *Group VI.*

GEORGE BARR SCHOLL. Baltimore. 1005 *W. Lanvale St.*
Baltimore City College, 1895. *Group III.*

ALEXANDER LAZEAR SETH. Baltimore. *Windsor, near Walbrook.*
Baltimore City College, 1895. *Group VI.*

FREDERICK WILLIAMSON SMITH. Baltimore. 4 *E. Biddle St.*
Mr. Marston's School. *Group I.*

ROBERT MARSDEN SMITH. Baltimore. 4 *E. Biddle St.*
Mr. Marston's School. *Group I.*

SOLOMON POWERS SMITH. Baltimore. 1302 *Aisquith St.*
Mr. Lamb's School. *Group III.*

VICTOR EDGEWORTH SMITH. Baltimore. 22 *E. Mt. Vernon Place.*
Private Instruction. *Group I.*

EDWIN ALBERT SPILMAN. Baltimore. 815 *N. Arlington Av.*
Dr. Deichmann's School. *Group I.*

CHARLES MINER STEARNS. Hartford, Conn. 1002 *Cathedral St.*
Collins St. Classical School, Hartford. *Group VII.*

WILLIAM PLUNKET STEWART. Baltimore. 329 *Dolphin St.*
Mr. Marston's School. *Group VI.*

ALBERT GAD STIDMAN. Baltimore. 610 *Mosher St.*
Baltimore City College, 1895. *Group VII.*

WILLIAM ELLINGER STRAUS. Baltimore. 1213 *Linden Av.*
Phillips Academy, Andover. *Group IV.*

GEORGE LANE TANEYHILL, JR. Baltimore. 1103 *Madison Av.*
Mr. Marston's School. *Group III.*

RENÉ TAVEAU. Baltimore. 117 *W. Lafayette Av.*
Dr. Deichmann's School. *Group III.*

RICHARD HENRY THOMAS. Baltimore. 1710 *Bolton St.*
Baltimore City College, 1896. *Group III.*

JOSEPH SEMMES TOBIN. Memphis, Tenn. 103 *W. Franklin St.*
A. B., Christian Brothers' College, Memphis, 1896. *Group III.*

BAYARD TURNBULL. Baltimore. 1530 *Park Av.*
Mr. Marston's School. *Group II.*

JOSEPH NATHAN ULMAN. Baltimore. 1829 *Eutaw Place.*
Mr. Marston's School. *Group VI.*

OTTOMAR SIEGMUND WERBER. Baltimore. 1112 *Mosher St.*
Dr. Deichmann's School. *Group III.*

JOHN BOSWELL WHITEHEAD. Norfolk, Va. 1211 *Madison Av.*
Norfolk Academy. *Group II.*

NATHAN WINSLOW. Baltimore. 1900 *Mt. Royal Terrace.*
Mr. Marston's School. *Group III.*

POWHATAN JOHNSON WOOLDRIDGE. Louisville, Ky. 1223 *Maryland Av.*
Mr. A. Flexner, Instructor. *Group III.*

JACOB FORNEY YOUNG. Baltimore. 1418 *Druid Hill Av.*
Mr. Marston's School. *Group IV.*

Candidates for Matriculation.

ROGER BROOKE TANEY ANDERSON. Baltimore. 723 *N. Calvert St.*
Private Instruction. *Group I.*

BERTRAM BERNHEIM. Louisville, Ky. *The Shirley.*
Mr. Flexner's School. *Preliminary Year.*

JAMES HENRY BRADY, JR. Baltimore. 100 *E. North Av.*
Private Instruction. *Preliminary Year.*

EDWARD SKIPWITH BRUCE. Baltimore. 1112 *N. Calvert St.*
Mr. Marston's School. *Group IV.*

COSEY WALKER CONSTANTINE. Birmingham, Ala. 325 *N. Carrollton Av.*
Webb School (Tenn.). *Preliminary Year.*

EDWARD PLASKITT CRUMMER. Baltimore. 608 *Lennox St.*
Baltimore City College. *Preliminary Year.*

CHARLES FRANCIS DIGGS, JR. Baltimore County. *Howardville.*
Private Instruction. *Preliminary Year.*

AARON EMBER. Baltimore. 800 *E. Lombard St.*
Private Instruction. *Preliminary Year.*

JOHN EDWARD EWELL. Baltimore. 1126 *Mosher St.*
Mr. Lamb's School. *Group I.*

FREDERICK BONNER FLINN. Worcester, Mass. 1126 *McCulloh St.*
Worcester Polytechnic Institute. *Group III.*

OTTO CHARLES GLASER. Baltimore. 2135 *Bolton St.*
Baltimore City College. *Group III.*

OTTO GMINDER. Baltimore. 2038 *Park Av.*
Mr. C. Maupin, Instructor. *Group II.*

JOSEPH DAVID GREENE, JR. Lake Benton, Minn. 515 *Cathedral St.*
University of Minnesota. *Group V.*

LOUIS WARDLAW HASKELL, JR. Savannah, Ga. 1002 *Cathedral St.*
Private Instruction. *Group III.*

HARRY LOUIS HOMER. Baltimore County. *Sherwood.*
Baltimore Polytechnic Institute. *Group VI.*

MARION JUNGBLUTH. Louisville, Ky. 1002 *Cathedral St.*
Mr. A. Flexner, Instructor. *Group III.*

GEORGE WROTH KNAPP, JR. Baltimore. 1232 *W. Lafayette Av.*
Mr. Lamb's School. *Group VI.*

MAURICE LAZENBY. Baltimore. 800 *W. North Av.*
Mr. Marston's School. *Group III.*

JOSHUA LEVERING, JR. Baltimore. 1316 *Eutaw Place.*
Mr. Marston's School. *Group VI.*

JOSEPH LOEB. Columbus, Ga. 734 *W. North Av.*
Dr. Deichmann's School. *Group VI.*

REGINALD LEY MCALL. Redhill, England. 509 *N. Carey St.*
Weymouth College (England). *Group III.*

EDWARD LIVINGSTON PALMER, JR. Baltimore. 2420 *Eutaw Place.*
Dr. Deichmann's School. *Group III.*

Attendants on Single Courses.

History and Economics.

James Teackle Dennis. Lafayette College.	Baltimore.	1008 *N. Calvert St.*
William Bayley Forney.	Baltimore.	821 *W. North Av.*
Harry C. Norris. Law School, University of Maryland.	Baltimore.	1501 *Presstman St.*
Albert W. Rayner.	Baltimore.	1814 *Eutaw Place.*

(4)

GOVERNMENT OF THE JOHNS HOPKINS UNIVERSITY.

TRUSTEES.

The Trustees are the ultimate source of authority in all matters pertaining to the University. They act collectively, through the standing committees named on page 2, and through the President of the University who is *ex officio* a member of the Board.

PRESIDENT.

Daniel C. Gilman.

The duties of this office were thus defined by the Trustees, September 14, 1876:

The President of the University is the authorized means of communication between the Board and the various officers of instruction and administration employed in the University; it shall be his duty to consult with the Professors in respect to the development of their various departments, and the general interests of the University; to determine the appropriate duties of the Associates and Fellows; and to exercise such superintendence over the buildings, apparatus, books, and other property as will insure their protection and appropriate use. In respect to these matters and all others which concern the welfare of the University, he shall consult frequently with the Executive Committee, and he shall attend the meetings of the Board of Trustees. Purchases, alterations, repairs, and other incidental expenses must not be ordered by any of the officers of the University without his previous assent, or the expressed authority of the Board.

ACADEMIC COUNCIL.

D. C. Gilman (*Pres.*),
B. L. Gildersleeve,
Ira Remsen (*Sec'y*),
H. A. Rowland,
Paul Haupt,
W. H. Welch,
Simon Newcomb,
E. H. Griffin,
H. B. Adams.

By authority of the Trustees, the Academic Council (now consisting of the President and eight Professors) has met since the organization of the University to guide the various departments of study, to select the Fellows, and to act upon such other matters as may be brought before them.

BOARD OF UNIVERSITY STUDIES.

D. C. Gilman (*Pres.*),
B. L. Gildersleeve,
Ira Remsen,
H. A. Rowland,
Paul Haupt,
W. H. Welch,
Simon Newcomb,
E. H. Griffin,
H. B. Adams,
W. K. Brooks,
Maurice Bloomfield,
Thomas Craig,
A. M. Elliott,
H. N. Morse,
Minton Warren,
Henry Wood,
W. H. Howell,
J. W. Bright,
W. Hand Browne,
W. B. Clark,
E. H. Spieker,
Louis Duncan,
E. A. Andrews,
J. S. Ames,
K. F. Smith,
Adolf Rambeau,
A. S. Chessin,
C. L. Poor,
Sidney Sherwood,
J. M. Vincent,
H. F. Reid,
C. W. E. Miller.

By request of the Academic Council (October 8, 1883), this Board, consisting of the President, nineteen Professors, and twelve Associate Professors, has charge of the arrangements for the instruction of graduate students, and of the examinations for the degree of Doctor of Philosophy.

ADVISORY BOARD OF THE MEDICAL SCHOOL.

D. C. Gilman (*Pres.*),	H. M. Hurd,	J. J. Abel,
Ira Remsen,	H. A. Kelly,	W. H. Howell,
W. H. Welch, (*Dean*),	W. K. Brooks,	F. P. Mall.
William Osler,	W. S. Halsted,	

This Board was constituted by resolution of the Trustees (April 3, 1893) "to report to the Trustees from time to time their suggestions, and to prepare and carry forward the proper arrangements for the instruction and graduation of medical students."

BOARD OF COLLEGIATE ADVISERS.

D. C. Gilman (*Pres.*),	Edward Renouf,	K. F. Smith,
Ira Remsen,	W. H. Howell,	Adolf Rambeau,
E. H. Griffin (*Dean*),	W. Hand Browne,	Sidney Sherwood,
H. B. Adams,	H. E. Greene,	J. M. Vincent,
A. M. Elliott,	E. H. Spieker (*Sec'y*),	L. S. Hulburt,
H. N. Morse,	Louis Duncan,	W. W. Randall,
Minton Warren,	E. A. Andrews,	B. J. Vos.
Henry Wood,	J. S. Ames,	

By request of the Academic Council (May 13, 1882), the Board of Collegiate Advisers, consisting of the President and of representatives from each of the chief departments of undergraduate study, confers upon the progress made by the undergraduates and special students, and conducts the examinations for matriculation and for the baccalaureate degree, under the direction of the Academic Council. The other teachers of undergraduates may be called in from time to time to consult.

By resolution of this Board (June 15, 1888), a Standing Committee was appointed to act on all routine matters. The Committee now consists of E. H. Griffin, E. Renouf, E. H. Spieker, and S. Sherwood.

COMMITTEE ON THE LIBRARY.

D. C. Gilman (*Pres.*),	Ira Remsen,	N. Murray (*Sec'y*).
B. L. Gildersleeve,	W. Hand Browne,	

COMMITTEE ON THE GYMNASIUM.

D. C. Gilman (*Pres.*),	E. Renouf,	J. B. Crenshaw.
James L. McLane,	H. F. Reid,	

ADVISORY BOARD OF THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

D. C. Gilman (*Pres.*),	E. H. Griffin (*Sec'y*),	B. C. Steiner.

TABULAR STATEMENTS.

1. Professors and Instructors, 1897–98.

President and Professors,	33
Associate Professors,	17
Associates,	23
Instructors and Assistants,	31
Lecturers,	19
	123

The enumeration includes 43 professors and other instructors whose work lies wholly in the Medical School.

2. Students Enrolled, 1897–98.

Fellows by Courtesy,	15
Fellows,	23
Other Graduates,	177
Candidates for the Degree of M. D.,	167
Physicians attending Special Courses,*	74
Undergraduates,	152
Special Students,	33
Total,	**641**

* Including those entering in 1897 after the issue of the last Register.

3. Enumeration of Degrees of Students.

The above enumeration of students includes—

Doctors of Philosophy,	15	Bachelors of Science,	84
Doctors of Medicine,	77	Bachelors of Philosophy,	20
Masters of Arts,	56	Other Graduates,	15
Masters of Science,	10	Clergymen,	17
Bachelors of Arts,	264		

4. Attendance upon the Various Courses of Instruction, 1897–98.

Mathematics,	74	Semitic Languages,	59
Physics and Astronomy,	105	German,	170
Chemistry,	139	Romance Languages,	79
Geology and Mineralogy,	39	English and Anglo-Saxon,	132
Biology,	156	History and Political Science,	129
Greek,	45	Philosophy,	61
Latin,	73	Drawing,	84
Sanskrit and Comp. Philology,	40	Forensics and Elocution,	181

5. Classification by Residences of Students, 1897–98.

Maryland (Baltimore, 229),	279	Colorado,	4
Virginia,	34	West Virginia,	4
Pennsylvania,	30	Texas,	3
New York,	29	Utah,	3
Ohio,	24	Louisiana,	2
North Carolina,	23	Rhode Island,	2
Massachusetts,	20	Tennessee,	2
Connecticut,	16	U. S. Army,	2
Illinois,	15	Arkansas,	1
California,	14	Kansas,	1
District of Columbia,	13	Nebraska,	1
Minnesota,	12	North Dakota,	1
Wisconsin,	11	Washington,	1
Georgia,	10		
Maine,	10	Canada,	14
Kentucky,	9	Hawaiian Islands,	2
Alabama.	7	Italy,	2
South Carolina,	7	Japan,	2
Indiana,	6	Asia Minor,	1
Michigan,	6	England,	1
Iowa,	5	India,	1
Missouri,	5	Ireland,	1
New Jersey,	5		

6. INSTITUTIONS IN WHICH THE STUDENTS (1897–98) WERE GRADUATED.

Johns Hopkins University,	84	Bellevue Hospital Med. Coll.,	2
Yale University,	32	Bowdoin College,	2
Maryland, University of,	20	Bowdoin Medical College,	2
Harvard University,	17	Brooklyn Polytechnic Institute,	2
Princeton University,	12	Bryn Mawr College,	2
Randolph-Macon College,	11	Columbia University,	2
Wisconsin, University of,	11	Denison University,	2
Hampden-Sidney College,	8	Franklin and Marshall College,	2
Virginia, University of,	8	Haverford College,	2
Baltimore Medical College,	7	Hebrew Union College,	2
California, University of,	7	Iowa State University,	2
Leland Stanford Jr. University,	7	Knox College,	2
Smith College,	7	Louisville Medical College,	2
Williams College,	7	Luther College,	2
Michigan, University of,	6	Missouri Medical College,	2
Amherst College,	5	New York University,	2
Cincinnati, University of,	5	North Carolina, University of,	2
Jefferson Medical College,	5	Pennsylvania College,	2
Ohio Wesleyan University,	5	Princeton Theological Seminary,	2
Phys. and Surg., College of (N.Y.),	5	Queen's University,	2
Toronto, University of,	5	Richmond College,	2
Chicago, University of,	4	Roanoke College,	2
Dickinson College,	4	Rose Polytechnic Institute,	2
Maryland Agricultural College,	4	Rush Medical College,	2
Minnesota, University of,	4	Texas, University of,	2
Pennsylvania, University of,	4	Trinity College (N. C.),	2
South Carolina College,	4	Virginia Polytechnic Institute,	2
Wake Forest College,	4	Virginia Theological Seminary,	2
Adelbert College,	3	Wabash College,	2
Brown University,	3	Wellesley College,	2
Cornell University,	3	Wesleyan University (Conn.),	2
Davidson College,	3	Western Maryland College,	2
Georgia, University of,	3	Woman's Medical College (Balt.),	2
Lafayette College,	3	Woman's Medical Coll. (N. Y.),	2
Oberlin College,	3	Woman's Medical Coll. (Phila.),	2
St. John's College,	3	Alabama Polytechnic Institute,	1
Trinity University (Ont.),	3	Albion College,	1
Union College,	3	Baldwin University,	1
Vassar College,	3	Bates College,	1
Washington and Lee University,	3	Boston College,	1
Alabama, University of,	2	Calvin College,	1
Albany Medical College,	2	Campbell University,	1

Carthage College,	1
Catholic University of America,	1
Central University (Ky.),	1
Charleston College,	1
Christian Brothers' Coll. (Memphis),	1
Christian Brothers' Coll. (St. Louis),	1
Cincinnati Coll. of Med. and Surg.,	1
Colby University,	1
Columbian University,	1
Cooper Medical College,	1
Denver, University of,	1
Earlham College,	1
Emory and Henry College,	1
France, University of,	1
Georgia Medical College,	1
German Wallace College,	1
Giessen, University of,	1
Hahnemann Med. Coll. (Phila.),	1
Hobart College,	1
Iowa Agricultural College,	1
Iowa College,	1
Ireland, Royal University of,	1
Kansas, University of,	1
Kentucky State College,	1
Kentucky University,	1
La Salle College,	1
Lehigh University,	1
Leipsic, University of,	1
Loyola College,	1
Marietta College,	1
Massachusetts Agric. College,	1
Miami Medical College,	1
Miami University,	1
Milligan College,	1
Minerva University (Rome),	1
Mississippi College,	1
Nashville, University of,	1
New Mexico School of Mines,	1
New Windsor College,	1
North Carolina Agric. College,	1
North Dakota Agric. College,	1
Northwestern University,	1
Omaha Medical College,	1
Otterbein University,	1
Pennsylvania State College,	1
Phy. and Surg., Coll. of (Balt.),	1
Rochester, University of,	1
Rock Hill College,	1
Rutgers College,	1
Southern Med. Coll. (Ga.),	1
Southwestern Presbyterian Univ.,	1
Stevens Institute of Technology,	1
St. John's University (Minn.),	1
St. Paul's Seminary (Minn.),	1
St. Thomas's College (Minn.),	1
Syracuse University,	1
Tokyo, University of,	1
Tulane University,	1
Union Theological Sem. (Va.),	1
U. S. Grant University (Tenn.),	1
Victoria University,	1
Villanova College (Pa.),	1
Virginia Military Institute,	1
Washington and Jefferson Coll.,	1
Westminster College (Pa.),	1
Westminster (Md.) Theol. Sem.,	1
William and Mary College,	1
Wilson College,	1
Wofford College,	1
Wooster, University of,	1

7. Fellows.

Bruce Memorial Fellows in Biology.

This Fellowship was instituted by Mrs. Bruce, of New York, to commemorate the name of her son, Adam T. Bruce, Jr., Ph. D., Fellow in Biology, 1883–84, and Instructor in Osteology and Mammalian Anatomy, 1886–87. Preference is given to those who have held an ordinary Fellowship in Biology. (When the institution is not named, this university is to be understood. *—Deceased.)

1888. Henry Van Peters Wilson, Ph. D. (1888), Professor of Biology, University of North Carolina.

1889. Shozaburo Watase, Ph. D. (1890), Assistant Professor of Cellular Biology, University of Chicago.

1890. Thomas Hunt Morgan, Ph. D. (1890), Professor of Biology, Bryn Mawr College. *Reappointed* 1891, *but resigned.*

1891, 1892. Robert Payne Bigelow, Ph. D. (1892), Instructor in Biology and Librarian, Massachusetts Institute of Technology; Editor-in-Chief, *American Naturalist.*

1893. Maynard Mayo Metcalf, Ph. D. (1893), Professor of Biology, Woman's College of Baltimore.

1894. Ross Granville Harrison, Ph. D. (1894), Associate in Anatomy. *Did not enter on the fellowship.*

1894. Seitaro Goto, S. D., Professor of Biology, First High School, Tokyo, Japan.

1895. Henry McElderry Knower, Ph. D. (1896), Instructor in Biology, Williams College, 1896–97; Fellow by Courtesy.

1895, 1896. George Lefevre, Ph. D. (1896), Assistant in Zoölogy.

1897. *Franklin Story Conant, Ph. D. (1897). *Did not enter on the fellowship.*

1897. Duncan Starr Johnson, Ph. D. (1897). (Now in residence).

Fellows.

(Arranged under the date of first appointment. When the institution is not named, this university is to be understood. Figures in brackets indicate the tenure of the fellowship, when it was held more than one year. *—Deceased.)

1876.

Henry Carter Adams, Ph. D., Professor of Political Economy and Finance, Univ. of Michigan; Statistician, Interstate Commerce Commission.—[1876–79].

Herbert Baxter Adams, Ph. D., LL. D., Professor of American and Institutional History.—[1876–78].

William Keith Brooks, Ph. D., LL. D., Professor of Zoölogy; Director of the Chesapeake Zoölogical Laboratory. *Did not enter on the fellowship.*

Samuel Fessenden Clarke, Ph. D., Professor of Natural History, Williams Coll.—[1876–79].

Thomas Craig, Ph. D., Professor of Pure Mathematics.—[1876–79].

Joshua Walker Gore, C. E., Professor of Natural Philosophy and Engineering, Univ. of North Carolina.—[1876–78].

George Bruce Halsted, Ph. D., Professor of Mathematics, Univ. of Texas.—[1876–78].

Edward Hart, Ph. D., Professor of Analytical Chemistry, Lafayette Coll.—[1876–78].

Daniel Webster Hering, C. E., Professor of Physics, New York Univ.—[1876–78].

Malvern Wells Iles, Ph. D., Chemist, Denver, Colorado.—[1876–78].

William White Jacques, Ph. D., Lecturer on Telegraph Engineering, Mass. Inst. of Tech., 1885–91; Electrician, Boston, Mass.—[1876–79].

Charles Rockwell Lanman, Ph. D., Professor of Sanskrit, Harvard Univ.; Turnbull Lecturer, 1897–98.

David McGregor Means, A. B., Professor of Political and Mental Science, Middlebury Coll., 1877–80; Attorney at Law, New York City.

Harmon Northrop Morse, Ph. D., Professor of Analytical Chemistry. *Did not enter on the fellowship.*

Walter Hines Page, Professor in Louisville (Ky.) Male High School, 1878–79; Editor of *The Atlantic Monthly*, Boston.—[1876–78].

* Peter Porter Poinier, M. E. *Did not enter on the fellowship.*

Erasmus Darwin Preston, C. E., U. S. Coast and Geodetic Survey, Washington.—[1876–78].

* Henry Joseph Rice, Sc. D., Professor of Natural Sciences, Brooklyn (N. Y.) High School, 1882–85.—[1876–78].

Josiah Royce, Ph. D., Professor of the History of Philosophy, Harvard.—[1876–78].

Alexander Duncan Savage, B. Litt., Farmington, Conn.—[1876–79].

Ernest Gottlieb Sihler, Ph. D., Professor of Latin, New York Univ.—[1876–79].

Frederick Boyd Van Vorst, A. B., Attorney at Law, New York City.

* John Henry Wheeler, Ph. D., Professor of Greek, Univ. of Virginia, 1882–87.

1877.

Francis Greenleaf Allinson, Ph. D., Associate Professor of Greek Literature and History, Brown Univ.—[1877–80].

Fabian Franklin, Ph. D., Assistant, Associate, Associate Professor, and Professor of Mathematics, 1879–95; Editor of *The Baltimore News*.—[1877–79].

Lyman Beecher Hall, Ph. D., Professor of Chemistry, Haverford Coll.—[1877–79].

Allan Marquand, Ph. D., L. H. D., Professor of Archæology and the History of Art, Princeton.—[1877–80].

1878.

Maurice Bloomfield, Ph. D., LL. D., Professor of Sanskrit and Comparative Philology.

Constantine Fahlberg, Ph. D., Chemist, Salbke-Westerhusen, Germany.—[1878–80].

Edwin Herbert Hall, Ph. D., Professor of Physics, Harvard Univ.—[1878–80].

Edward Coles Harding, A. M., Professor of Greek, Univ. of Louisiana, 1879–80; Editor of *The Baltimore American*.

Rev. Charles Robert Hemphill, D. D., Professor of New Testament Exegesis, Louisville Presbyterian Theol. Sem.; Clergyman, Louisville, Ky.

Isaac Ott, M. D., Professor of Physiology, Medico-Chirurgical Coll. of Philadelphia.

Henry Sewall, Ph. D., M. D., Professor of Physiology, Univ. of Denver.

Christian Sihler, Ph. D., M. D., Instructor and Acting Professor of Histology, etc., Western Reserve Univ., 1889–94; Physician, Cleveland, Ohio.—[1877–79].

Washington Irving Stringham, Ph. D., Professor of Mathematics, Univ. of California.—[1878–80].

Charles Ambrose Van Velzer, S. B., Professor of Mathematics, Univ. of Wisconsin.—[1878–81].

Abram Van Epps Young, Ph. B., Professor of Chemistry, Northwestern Univ.—[1878–80].

1879.

Brown Ayres, S. B., Professor of Physics and Astronomy, Tulane Univ.

Louis Bevier, Ph. D., Professor of Greek, Rutgers Coll.—[1879–81].

William Burney, Ph. D., Professor of Chemistry, Univ. of South Carolina.

Edward Mussey Hartwell, Ph. D., M. D., Director of Physical Training, Boston Public Schools, 1891–97; Secretary, Dept. of Municipal Statistics, Boston.—[1879–81].

* John Robin McDaniel Irby, Ph. D.

Mitsuru Kuhara, Ph. D., Director and Professor of Chemistry, First Middle School, Tokyo.—[1879–81].

*Oscar Howard Mitchell, Ph. D., Professor of Mathematics, Marietta Coll., 1882–89.—[1879–82].

Edward Leamington Nichols, Ph. D., Professor of Physics, Cornell Univ.

George Frederick Nicolassen, Ph. D., Professor of Greek and German, Southwestern Presbyterian Univ., Tenn.—[1879–81].

Waldo Selden Pratt, A. B., Professor of Ecclesiastical Music and Hymnology, Hartford (Conn.) Theol. Sem.

Robert Woodworth Prentiss, M. S., Professor of Mathematics and Astronomy, Rutgers Coll.—[1879–81].

William Thompson Sedgwick, Ph. D., Professor of Biology, Mass. Inst. of Tech.; Biologist, Mass. Board of Health; Curator, Lowell Inst., Boston.

*Herman Voorhees, C. E. *Did not enter on the fellowship.*

Charles Otis Whitman, Ph. D., LL. D., Professor of Zoölogy, Univ. of Chicago. *Did not enter on the fellowship.*

Edmund Beecher Wilson, Ph. D., Professor of Invertebrate Zoölogy, Columbia Univ.—[1879–81].

1880.

James Wilson Bright, Ph. D., Professor of English Philology.—[1880–82].

Benjamin Chapman Burt, A. B., Acting Professor of Philosophy and Pedagogy, Univ. of Colorado, 1894–95.

Robert Dorsey Coale, Ph. D., Professor of Chemistry and Toxicology, and Dean of the Medical Faculty, Univ. of Maryland.

Lawrence Bunting Fletcher, Ph. D., Instructor in Physics, Wesleyan Univ., 1882–83; Marlboro, N. Y.

*Spencer Hedden Freeman, A. B., Professor of Physics and Astronomy, Adelbert Coll., 1882–86.—[1880–82].

Kakichi Mitsukuri, Ph. D., Professor of Zoölogy, Univ. of Tokyo, Japan.

Bernard Francis O'Connor, Ph. D., Instructor and Adjunct Professor of Romance Languages, Columbia Univ., 1883–91; New York City.—[1880–82].

Chase Palmer, Ph. D., Professor of Chemistry, Manual Training High School, Louisville, Ky.—[1880–82].

Herbert Mills Perry, A. B., late Instructor, Cascadilla School, Ithaca.—[1880–82].

William Lee Rowland, S. B., Chemist, Philadelphia. *Did not enter on the fellowship.*

Andreas Franz Wilhelm Schimper, Ph. D., Professor of Botany, Univ. of Bonn.

Edward Henry Spieker, Ph. D., Associate Professor of Greek and Latin.—[1880–82].

Morrison Isaac Swift, Ph. D., Instructor in Philosophy, Hobart Coll., 1882–84.—[1880–82].

*Arthur Wilson Wheeler, A. B.

1881.

William John Alexander, Ph. D., Professor of English, Univ. of Toronto.—[1881–83].

Edward Sandford Burgess, A. B., Professor of Natural Science, Normal Coll., N. Y.

William James Comstock, Ph. D., Instructor in Organic Chemistry, Yale Univ., 1888–93; New Haven, Conn.

William Cathcart Day, Ph. D., Professor of Chemistry and Physics, Swarthmore Coll.—[1881–83].

Henry Herbert Donaldson, Ph. D., Professor of Comparative Neurology, Univ. of Chicago.—[1881–83].

William Pitt Durfee, Ph. D., Professor of Mathematics, and Dean of the Faculty, Hobart Coll.—[1881–83].

George Stetson Ely, Ph. D., Examiner, U. S. Patent Office.—[1881–83].

Benjamin Ives Gilman, A. B., Curator, Museum of Fine Arts, Boston, Mass.

John Franklin Jameson Ph. D., Professor of History, Brown Univ.

Charles Herschel Koyl, A. B., Instructor in Physics, Swarthmore Coll., 1887–88; New York City.—[1881–83].

Henry Leslie Osborn, Ph. D., Professor of Biology and Geology, Hamline Univ.

Henry Newlin Stokes, Ph. D., Assistant Professor of Chemistry, Univ. of Chicago, 1892–94; U. S. Geological Survey, Washington.—[1881–83].

Benjamin Willis Wells, Ph. D., Professor of Modern Languages, Univ. of the South. *Did not enter on the fellowship.*

1882.

Charles John Bell, A. B., Professor of Chemistry, Univ. of Minnesota. *Did not enter on the fellowship.*

James McKean Cattell, Ph. D., Professor of Psychology, Columbia; Editor of *Science.*

Ellery William Davis, Ph. D., Professor of Mathematics, Univ. of Nebraska.—[1882–84].

David Talbot Day, Ph. D., U. S. Geological Survey, Washington, D. C.—[1882–84].

Alfred Emerson, Ph. D., Associate Professor of Classical Archæology, Cornell Univ.—[1882–84].

William Scott Fleming, A. B., Professor of Greek and German, Davidson Coll., 1883–85; Wetumpka, Ala.

Arthur Lincoln Frothingham, Jr., Ph. D., Professor of Archæology and the History of Art, Princeton.—[1882–85].

Henry Root Goodnow, A. B., New York City.

Elgin Ralston Lovell Gould, Ph. D., President, City and Suburban Homes Co., New York.—[1882–84].

Arthur Stafford Hathaway, S. B., Professor of Mathematics, Rose Polytech. Inst.—[1882–84].

William Henry Howell, Ph. D., M. D., Professor of Physiology.—[1882–84].

Edward Harrison Keiser, Ph. D., Professor of Chemistry, Bryn Mawr.—[1882–84].

Arthur Lalanne Kimball, Ph. D., Professor of Physics, Amherst Coll.

Harry Fielding Reid, Ph. D., Associate Professor of Geological Physics. *Did not enter on the fellowship.*

1883.

William Muss Arnolt, Ph. D., Instructor and Assistant Recorder, Univ. of Chicago.—[1883–85].

Gustav Bissing, Ph. D., Examiner, U. S. Patent Office, 1884–97; Patent Lawyer, Washington.

*Adam Todd Bruce, Ph. D., Instructor in Osteology, etc., 1886–87.

Archibald Lamont Daniels, D. Sc., Williams Professor of Mathematics and Physics, Univ. of Vermont.

John Dewey, Ph. D., Professor of Philosophy, Univ. of Chicago.

*James Reynolds Duggan, Ph. D., Professor of Chemistry, Wake Forest, 1886–88.

Hans Carl Günther von Jagemann, Ph. D., Assistant Professor of German, Harvard.

*Gustav Adolph Liebig, Jr., Ph. D., Assistant in Electricity, 1887–90.—[1883–85].

Charles William Emil Miller, Ph. D., Associate Professor of Greek.—[1883–85].

Charles Albert Perkins, Ph. D., Associate Professor of Physics and Electrical Engineering, Univ. of Tennessee.

*Lewis Tebbetts Stevens, M. D., late Lecturer, Washington Univ.

Lewis Webb Wilhelm, Ph. D., Mathematical Instructor, Baltimore.

1884.

Ethan Allen Andrews, Ph. D., Associate Professor of Biology.—[1884–86].

Henry Crew, Ph. D., Professor of Physics, Northwestern Univ.—[1884–86].

Homer Winthrop Hillyer, Ph. D., Assistant Professor of Organic Chemistry, Univ. of Wisconsin.

Rev. Abel Henry Huizinga, Ph. D., Adjunct Professor, McCormick Theol. Sem., 1894–96; Clergyman, Fishkill, N. Y.—[1884–86].

Frederick Schiller Lee, Ph. D., Adjunct Professor of Physiology, Columbia Univ.

Charles Herbert Levermore, Ph. D., President of Adelphi College, Brooklyn.

Henry Francis Nachtrieb, S. B., Professor of Biology, Univ. of Minnesota.

Henry Barber Nixon, Ph. D., Professor of Mathematics, Pennsylvania Coll.
William Noyes, Jr., M. D., Superintendent, Boston Insane Hospital, Mattapan, Mass.
Albert Gallatin Palmer, Ph. D., Assistant Professor of Chemistry, Swarthmore Coll., 1886–87; Norwood, Md.
Ernest Mondell Pease, A. B., Professor of Latin, Leland Stanford Jr. Univ.—[1884–86].
Albert Harris Tolman, Ph. D., Assistant Professor of English Literature, Univ. of Chicago. *Did not enter on the fellowship.*
Woodrow Wilson, Ph. D., LL. D., Professor of Jurisprudence, etc., Princeton; Lecturer on Constitutional Law, New York Law School; Lecturer in Political Science.

1885.

Cyrus Adler, Ph. D., Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian Univ.—[1885–87].
*David Barcroft, Ph. D.
William Shirley Bayley, Ph. D., U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.—[March, 1885–June, 1886].
Louis Bell, Ph. D., Professor of Physics, etc., Purdue Univ., 1888–90; Chief Engineer, General Electric Company, Chicago, Ill.—[1885–87].
William Henry Burnham, Ph. D., Instructor in Pedagogy, Clark Univ.
Francis Albert Christie, A. B., Professor of Church History, Theol. School, Meadville, Pa.—[1885–87].
Davis Rich Dewey, Ph. D., Professor of Economics and Statistics, Mass. Inst. of Tech.
Albert E. Egge, Ph. D., Professor of English, Washington Agric. Coll.
William Henry Emerson, Ph. D., Professor of Chemistry, Georgia School of Tech.
John Charles Fields, Ph. D., Professor of Mathematics, Allegheny Coll.
Joseph Jastrow, Ph. D., Professor of Experimental Psychology, Univ. of Wisconsin.
George Theophilus Kemp, Ph. D., M. D., Professor of Physiology, Univ. of Illinois.
Marion Dexter Learned, Ph. D., Professor of German, Univ. of Pennsylvania.
Gonzalez Lodge, Ph. D., Professor of Latin, Bryn Mawr College.
Arthur McDonald, A. B., Bureau of Education, Washington, D. C. *Did not enter on the fellowship.*
Charles Skeele Palmer, Ph. D., Professor of Chemistry, Univ. of Colorado.
George Thomas White Patrick, Ph. D., Professor of Philosophy, Iowa State Univ. *Reappointed* 1887, *but resigned.*
Moses Slaughter, Ph. D., Professor of Latin, Univ. of Wisconsin.
Charles Whetham, A. B., President of Whetham Coll., Vancouver, B. C., 1890–93; Toronto, Ont.
Charles Baker Wright, A. B., Professor of English Literature and Rhetoric, Middlebury Coll. *Did not enter on the fellowship.*

1886.

Edgar Pierce Allen, A. B., Attorney at Law, New York City.—[1886–88].
John Pendleton Campbell, Ph. D., Professor of Biology, Univ. of Georgia.
Henry Clarke, A. B., Classical Instructor, London, England.
Herbert Charles Elmer, Ph. D., Assistant Professor of Latin, Cornell Univ.
Henry Brayton Gardner, Ph. D., Associate Professor of Political Economy, Brown Univ.
*Milton Haight, A. B., Professor of English and Mathematics, Sapporo Agric. Coll., Japan, 1887–92; Instructor, Collegiate Inst., Strathroy, Canada, 1893–96.
John Leslie Hall, Ph. D., Professor of English and History, William and Mary Coll.
Charles Willard Hayes, Ph. D., U. S. Geological Survey, Washington.
George Benjamin Hussey, Ph. D., Docent, Univ. of Chicago.
James Hervey Hyslop, Ph. D., Professor of Logic and Ethics, Columbia Univ.
Andrew Cowper Lawson, Ph. D., Associate Professor of Geology and Mineralogy, Univ. of California.
Franklin Paine Mall, M. D., Professor of Anatomy.—[1886–88].

Yujiro Motora, Ph. D., Professor of Psychology, etc., Univ. of Tokyo, Japan.
Julius Nelson, Ph. D., Professor of Biology, Rutgers Coll.
William Ridgely Orndorff, Ph. D., Asst. Professor of Organic Chemistry, Cornell Univ.
Daniel Richard Randall, Ph. D., Attorney at Law, Annapolis, Md.
Henry Dallas Thompson, D. Sc., Ph. D., Professor of Mathematics, Princeton.
Edward Burr Van Vleck, Ph. D., Associate Professor of Mathematics, Wesleyan Univ.
Amos Griswold Warner, Ph. D., Professor of Economics, Leland Stanford Jr. Univ.
John Roaf Wightman, Ph. D., Professor of Romance Languages, Oberlin Coll.

1887.

Joseph Sweetman Ames, Ph. D., Associate Professor of Physics.
Philip Wheelock Ayres, Ph. D., Secretary, Organized Charities, Chicago, Ill.
William Snyder Eichelberger, Ph. D., Instructor in Mathematics, etc., Wesleyan Univ., 1891–96; U. S. Nautical Almanac, Washington.
Henry Rushton Fairclough, Ph. D., Associate Professor of Greek and Latin, Leland Stanford Jr. Univ. *Did not enter on the fellowship.*
*William Curns Lawrence Gorton, Ph. D., Associate Professor and Professor of Mathematics and Astronomy, Woman's Coll., Baltimore, 1888–94.
William Herbert Hobbs, Ph. D., Assistant Professor of Mineralogy and Metallurgy, Univ. of Wisconsin.
Joseph Hoeing Kastle, Ph. D., Professor of Chemistry, Kentucky State Coll.
Felix Lengfeld, Ph. D., Assistant Professor of Chemistry, Univ. of Chicago.
Archibald MacMechan, Ph. D., Professor of English, etc., Dalhousie Univ.
Herbert William Magoun, Ph. D., Acting Professor of Greek and Latin, Oberlin, 1892–95; Oberlin, O.
*Thomas McCabe, Ph. D., Associate in Romance Languages, Bryn Mawr, 1890–91.
John Leverett Moore, Ph. D., Professor of Latin, Vassar Coll.
Augustus Taber Murray, Ph. D., Professor of Greek, Leland Stanford Jr. Univ.
Edmund Clark Sanford, Ph. D., Assistant Professor of Psychology, Clark Univ.
Charles Lee Smith, Ph. D., Professor of History, William Jewell Coll., Mo.
Arthur Clarence Wightman, Ph. D., Adjunct Professor of Biology and Physics, Randolph Macon Coll.
Henry Van Peters Wilson, Ph. D., Professor of Biology, Univ. of North Carolina.

1888.

Charles McLean Andrews, Ph. D., Associate Professor of History, Bryn Mawr.
Frank Wilson Blackmar, Ph. D., Professor of History and Sociology, Univ. of Kansas.
Charles Augustus Borst, A. B., Assistant in Astronomy, 1889–92; Washington, D. C.
William Merriam Burton, Ph. D., Superintendent, Standard Oil Co., Whiting, Ind.
Morgan Callaway, Jr., Ph. D., Associate Professor of English, Univ. of Texas.
Charles Hiram Chapman, Ph. D., President of the Univ. of Oregon.
Edwin Whitfield Fay, Ph. D., Professor of Latin, Washington and Lee.—[1888–90].
Adam Capen Gill, Ph. D., Assistant Professor of Mineralogy, etc., Cornell Univ.
Joseph Edward Harry, Ph. D., Professor of Greek and German, Georgetown Coll., Ky.
James Taft Hatfield, Ph. D., Professor of German, Northwestern Univ.
George Allison Hench, Ph. D., Professor of German, Univ. of Michigan.
Clifton Fremont Hodge, Ph. D., Assistant Professor of Physiology, Clark Univ.
Cary Talcott Hutchinson, Ph. D., Electrical Engineer, New York City.
Alvin Frank Linn, Ph. D., Professor of Chemistry and Mineralogy, Wittenberg Coll., O. *Did not enter on the fellowship.*
Thomas Logie, Ph. D., Associate Professor of Romance Languages, Rutgers Coll.
Alfred Edward Thayer, M. D., Physician, New York City.
*James Starr Trueman, A. B., Professor of Greek and Latin, Allegheny Coll., 1889–92.
Shozaburo Watase, Ph. D., Assistant Professor of Cellular Biology, Univ. of Chicago.

1889.

Edward Carey Applegarth, Ph. D., M. D., Physician, Baltimore.
Arthur George Blachstein, A. B., M. D., St. Petersburg, Russia.
Rudolf John Julius de Roode, Jr., Ph. D., Analytical Chemist, New York City.
George Peter Dreyer, Ph. D., Associate in Biology.
Hermann Louis Ebeling, Ph. D., Professor of Greek, Miami Univ.
Charles Jaques Goodwin, Ph. D., Tutor in Greek, Wesleyan Univ., 1891–95.
Christopher Johnston, Jr., Ph. D., Associate in Semitic Languages.—[1889–91].
Hiram Benjamin Loomis, Ph. D., Instructor in Physics, Academy of Northwestern Univ.
John Hanson Thomas McPherson, Ph. D., Professor of History, Univ. of Georgia.
Thomas Hunt Morgan, Ph. D., Professor of Biology, Bryn Mawr.
Daniel Alexander Murray, Ph. D., Instructor in Mathematics, Cornell Univ.
Charles Lane Poor, Ph. D., Associate Professor of Astronomy.
George Mann Richardson, Ph. D., Professor of Organic Chemistry, Leland Stanford Jr. Univ.
John Cunningham Robertson, Ph. D., Professor of Greek, St. Stephen's Coll., N. Y.
Charles Hunter Ross, Ph. D., Adjunct Professor of Modern Languages, Alabama Polytech. Inst.
Joseph Samuel Shefloe, Ph. D., Professor of Romance Languages and Librarian, Woman's Coll., Baltimore.
Robert Benson Steele, Ph. D., Professor of Latin, Illinois Wesleyan Univ.
Bert John Vos, Ph. D., Associate in German.—[1889–91].
James Albert Woodburn, Ph. D., Professor of American History, Indiana Univ.

1890.

William Wilson Baden, Ph. D., Professor of Greek, Central Univ., 1893–96.—[1890–92].
Robert Payne Bigelow, Ph. D., Instructor in Biology and Librarian, Mass. Inst. of Tech.; Editor-in-Chief, *American Naturalist*.
Edwin Grant Conklin, Ph. D., Professor of Comparative Embryology, Univ. of Pennsylvania.
Rev. William Levering Devries, B. D., Ph. D., Clergyman, Washington, D. C.
George Houghton Gilman, A. B., LL. B., Attorney at Law, New York City. *Did not enter on the fellowship.*
Thomas Perrin Harrison, Ph. D., Professor of English, Davidson Coll.
Charles Rollin Keyes, Ph. D., late State Geologist of Missouri.
Edwin Seelye Lewis, Ph. D., Assistant Professor of Romance Languages, Princeton.
Arthur Stanley Mackenzie, Ph. D., Professor of Physics, Bryn Mawr.
Henry Parker Manning, Ph. D., Assistant Professor of Mathematics, Brown Univ.
Wilfred Pirt Mustard, Ph. D., Professor of Latin, Haverford Coll.
Barker Newhall, Ph. D., Classical Instructor, Monson, Mass.
Edward Bennett Rosa, Ph. D., Professor of Physics, Wesleyan Univ.
Charles Edward Saunders, Ph. D., Professor of Chemistry, Central Univ., Ky., 1891–93; Ottawa, Canada.
Bernard Christian Steiner, LL. B., Ph. D., Librarian, Enoch Pratt Free Library; Associate in History.
John White, Jr., Ph. D., Instructor in Chemistry, Univ. of Nebraska.
Westel Woodbury Willoughby, Ph. D., Attorney at Law, Washington, D. C.; Associate in Political Science.

1891.

Edward Ambrose Bechtel, A. B., Instructor in Latin, Northwestern Univ., 1893–97. *Did not enter on the fellowship.*
Julius Blume, Modern Lang. Master, University School, Baltimore.
Albert Bernhardt Faust, Ph. D., Associate Professor of German, Wesleyan Univ.

Simon Flexner, M. D., Associate Professor of Pathology.
Ulysses Sherman Grant, Ph. D., Assistant State Geologist, Minneapolis, Minn.
William Asbury Harris, Ph. D., Professor of Greek, Baylor Univ., Texas.
Harry Clary Jones, Ph. D., Instructor in Physical Chemistry.
James Lawrence Kellogg, Ph. D., Professor of Biology, Olivet Coll.
Elmer Peter Kohler, Ph. D., Associate in Chemistry, Bryn Mawr.
*Paul Erasmus Lauer, Ph. D., Assistant Supt. of Schools, Cleveland, O., 1892–93.
David Judson Lingle, Ph. D., Instructor in Physiology, Univ. of Chicago.
John Hanson Thomas Main, Ph. D., Professor of Greek, Iowa Coll.
Frank Jewett Mather, Jr., Ph. D., Instructor in English, Williams Coll.
Michael Andrew Mikkelsen, Ph. D., Montclair, N. J.
John Dyneley Prince, Ph. D., Professor of Semitic Languages, etc., New York Univ.
Brantz Mayer Roszel, Ph. D., Instructor in Physics, Washington (D. C.) High School.
George Owen Squier, Ph. D., First Lieut., U. S. A.; Instructor, Artillery School, Fortress Monroe.
Sidney Grant Stacey, Ph. D., Instructor in Latin, Brooklyn (N. Y.) High School.
Joseph Moody Willard, A. B., Professor of Mathematics, Pennsylvania State Coll.

1892.

Burleigh Smart Annis, A. B., Instructor in Mathematics, Northwestern Univ.
Lewellys Franklin Barker, M. D., Associate Professor of Anatomy.—[1892–94].
Melvin Brandow, A. B., Assistant Librarian.
Alexander Mitchell Carroll, Ph. D., Professor of Greek, Richmond Coll., 1895–97.
Harry Max Ferren, A. B., Instructor in German, Allegheny (Pa.) High School.
David Hull Holmes, Ph. D., Instructor in Latin, Sachs's Collegiate Inst., N. Y.
Arthur John Hopkins, Ph. D., Assistant Professor of Chemistry, Amherst Coll.
Theodore Hough, Ph. D., Assistant Professor of Biology, Mass. Inst. of Tech.
James Alton James, Ph. D., Professor of History, Cornell Coll., Iowa.
Francis Plaisted King, Ph. D., Asst. Geologist of Georgia, 1893–96; Portland, Me.
Emory Bair Lease, Ph. D., Assistant Professor of Latin, Univ. of Michigan.
*Edward Payson Manning, Ph. D., Instructor in Mathematics, St. Lawrence Univ., 1894–95.
Louis Emil Menger, Ph. D., Associate Professor of Romance Philology, Bryn Mawr.
*Lucius Salisbury Merriam, Ph. D., Instructor in Political Economy, Cornell, 1893–94.
Mayo Maynard Metcalf, Ph. D., Professor of Biology, Woman's Coll., Baltimore.
René de Poyen-Bellisle, Ph. D., Instructor in Romance Philology, Univ. of Chicago.
Arthur Percy Saunders, Ph. D., Instructor in Chemistry, Univ. of Wisconsin, 1894–97.
Rev. Daniel Gurden Stevens, Jr., Ph. D., Clergyman, Baltimore.—[1892–94].
Frederick Tupper, Jr., Ph. D., Professor of English, Univ. of Vermont.
Frank Alfred Wolff, Jr., Ph. D., Chemist, Department of Agriculture, Washington.

1893.

Thomas Stockham Baker, Ph. D., Instructor in German.
John Spencer Bassett, Ph. D., Professor of History, Trinity Coll., N. C.
George Melville Bolling, Ph. D., Fellow by Courtesy; Assistant Professor of Comparative Philology, etc., Catholic Univ.
Abraham Cohen, Ph. D., Instructor in Mathematics.
Ervin Sidney Ferry, S. B., New York City.
William Francis Gallaway, Ph. D., Classical Instructor, Savannah, Ga.
Ross Granville Harrison, Ph. D., Associate in Anatomy.
Bert Holmes Hite, M. S., Chemist, Agric. Experiment Station of W. Va.—[1893–95].
Samuel Verplanck Hoffman, M. E., Fellow by Courtesy.
Jacob H. Hollander, Ph. D., Associate in Economics.
Charles William Leverett Johnson, Ph. D., Instructor in Greek, Yale Univ.
George Wesley Johnston, Ph. D., Lecturer in Latin, Univ. of Toronto.

George Charles Keidel, Ph. D., Instructor in Romance Languages.—[1893–95].
Edward Bennett Mathews, Ph. D., Associate in Mineralogy.
Edwin Fitch Northrup, Ph. D., Associate Professor of Physics, Univ. of Texas, 1896–97; Philadelphia.—[1893–95].
Alfred William Stratton, Ph. D., Assistant in Sanskrit, Univ. of Chicago.—[1893–95].
Frederick Henry Sykes, Ph. D., University Extension Lecturer, and Editor of *The Citizen*, Philadelphia.
George Francis Weida, Ph. D., Professor of Pure Chemistry, Kansas Agric. Coll.

1894.

Arthur Fisher Bentley, Ph. D., Docent in Sociology, Univ. of Chicago.
Samuel Walker Beyer, Ph. D., Associate Professor of Geology, Iowa Agric. Coll.
Clarence Griffin Child, Ph. D., Assistant Editor, Worcester's Dictionary; Instructor in English, Univ. of Pa.
Frank Hollander Clutz, Ph. D., Instructor, Midland Coll., Kan.—[1894–96].
Fonger DeHaan, Ph. D., Associate in Spanish, Bryn Mawr. *Did not enter on the fellowship.*
Henry Stewart Gane, Ph. D., U. S. Geological Survey, Washington.
William August Haussmann, Ph. D., Instructor, Allegheny High School, Pa.
Reid Hunt, Ph. D., M. D., Tutor in Physiology, Columbia Univ.; Associate (*elect*) in Pharmacology.—[1894–96].
Thomas Franklin Kane, Ph. D., Professor of Latin, Olivet Coll.
William Hamilton Kirk, Ph. D., Instructor in Latin, Vanderbilt Univ.
Henry McElderry Knower, Ph. D., Instructor in Biology, Williams Coll., 1896–97; Fellow by Courtesy.
George Lefevre, Ph. D., Assistant in Zoology.
Caspar Levias, A. B., Professor of Exegesis and Hebrew Grammar, Hebrew Union Coll., Cincinnati. *Reappointed* 1895, *but resigned.*
William Henry Maltbie, Ph. D., Associate Professor of Mathematics, Woman's Coll., Baltimore.
Thomas Francis Moran, Ph. D., Professor of History and Economics, Purdue Univ.
Louis Trenchard More, Ph. D., Demonstrator of Physics, Univ. of Neb.
James Flack Norris, Ph. D., Instructor in Chemistry, Mass. Inst. of Tech.
Herbert Dodge Pease, M. B., Bacteriologist, Board of Health, Philadelphia.

1895.

Norman Ross Carmichael, A. M., Assistant in Mathematics, Queen's Univ., Canada.
Arthur Douglas Chambers, Ph. D., Chemist, Ashburn, Mo.
*Franklin Story Conant, Ph. D., Bruce Fellow, 1897.
Rev. Eneas Bernard Goodwin, A. B., Clergyman, Chicago, Ill.
William Jackson Humphreys, Ph. D., Instructor in Physics, Univ. of Va.
Oliver Martin Johnston, Ph. D., Asst. Professor of Romance Lang., Stanford Univ.
Gordon Jennings Laing, Ph. D., Reader in Latin, Bryn Mawr.
Louis Eugene Livingood, M. D., Assistant in Pathology.
Ebenezer Mackay, Ph. D., Professor of Chemistry and Mineralogy, Dalhousie Univ.
John McLaren McBryde, Jr., Ph. D., Professor of English, Hollins Inst., Va.
Henry Ludwell Moore, Ph. D., Professor of Economics, Smith Coll.
Charles William Peppler, Ph. D., Fellow by Courtesy.
Franklin Lafayette Riley, Ph. D., Professor of History, Univ. of Miss.
Frederick George Gottlob Schmidt, Ph. D., Professor of Modern Lang., Univ. of Oregon.
John Adams Scott, Ph. D., Asst. Professor of Greek, Northwestern Univ.
George Otis Smith, Ph. D., U. S. Geological Survey, Washington.
M. Victor Staley, Ph. D., Professor in the Univ. of Washington.
Thomas Hardy Taliaferro, Ph. D., Instructor in Mathematics, Pennsylvania State Coll.
Harry Langford Wilson, Ph. D., Instructor in Latin. *Did not enter on the fellowship.*

1896.

Edward Cooke Armstrong, Ph. D., Instructor in Romance Languages.
James Morton Callahan, Ph. D., Lecturer in History, Hamilton Coll.
Edward Perkins Carter, M. D., Resident Physician, Lakeside Hospital, Cleveland.
Hubert Lyman Clark, Ph. D., Instructor in Biology, Amherst Coll.
Noah Ernest Dorsey, Ph. D., Assistant in Physics.
Pelham Edgar, Ph. D., Professor of Modern Languages, Victoria Univ., Ont.
Edwin Luther Green, Ph. D., Fellow by Courtesy; Professor (*elect*), Central Univ., Ky.
Arthur Sewall Haggett, Ph. D., Student in Europe.
William Edwards Henderson, Ph. D., Professor of Chemistry, Ohio Univ.
Charles Hoeing, A. B., now Fellow.—[1896–98].
Duncan Starr Johnson, Ph. D., Bruce Fellow.
Paul Henry Land, A. B., Fellow by Courtesy.
Omera Floyd Long, Ph. D., Instructor in Latin, Northwestern Univ.
William Tyler Mather, Ph. D., Assistant in Physics, 1897; Associate Professor of Physics, Univ. of Texas.
Jens Anderson Ness, A. B., now Fellow.—[1896–98].
Alexander Pell, Ph. D., Professor of Mathematics, Univ. of South Dakota.
Cornelius William Prettyman, A. B., Assistant in German, Univ. of Pa.
Charles Dabney Ragland, Ph. D., Professor of Chemistry, Randolph Macon Coll.
Frank Roy Rutter, Ph. D., Fellow by Courtesy.
George Burbank Shattuck, Ph. D., Assistant in Geology.

The list of the present holders of Fellowships is given on page 12.
The whole number of Fellows appointed in twenty-two years is 364.

8. Doctors of Philosophy.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1878.

Henry Carter Adams, (F), A. B., Iowa, 1874, Instructor, 1879–81, Lecturer, 1892–94, Lecturer and Associate Professor, Cornell, 1879–87.—Professor of Political Economy, etc., Univ. of Mich.; Statistician, Interstate Commerce Commission.

Thomas Craig, (F), C. E., Lafayette, 1875, U. S. Coast Survey, 1879–81, Instructor, Associate, and Associate Professor, 1879–92.—Professor of Pure Mathematics.

Josiah Royce, (F), A. B., Univ. of Cal., 1875, Assistant Professor, Univ. of Cal., 1878–82.—Professor of Philosophy, Harvard.

Ernest Gottlieb Sihler, (F), Concordia, 1869, Professor, Concordia Coll., Milwaukee, 1891–92.—Professor of Latin, N. Y. Univ. (4)

1879.

Maurice Bloomfield, (F), A. M., Furman, 1877, LL. D., Princeton, 1896, Associate and Associate Professor, 1881–91.—Professor of Sanskrit and Comparative Philology.

Samuel Fessenden Clarke, (F), Ph. B., Yale, 1878, Assistant, 1879–81.—Professor of Natural History, Williams Coll.

George Bruce Halsted, (F), A. B., Princeton, 1875, Tutor and Instructor, Princeton, 1878–84.—Professor of Mathematics, Univ. of Texas.

Edward Hart, (F), S. B., Lafayette, 1874.—Professor of Analytical Chemistry, Lafayette Coll.

William White Jacques, (F), S. B., Mass. Inst. of Tech., 1876, and Lecturer in the Inst., 1885–91.—Electrician, Boston.

Henry Sewall, (F), S. B., Wesleyan, 1876. Hon. M. D., Univ. of Mich., 1888, M. D., Univ. of Colorado, 1889, Associate in Biology, 1880–82, Professor, Univ. of Mich., 1882–89.—Professor of Physiology, Univ. of Denver. (6)

1880.

Francis Greenleaf Allinson, (F), A. B., Haverford, 1876, A. B., Harvard, 1877, Assistant Professor, Haverford, 1880–82, Associate Professor, Williams, 1892–95.—Associate Professor of Greek Literature and History, Brown Univ.

Fabian Franklin, (F), Ph. B., Columbian, 1869, Assistant, Associate, Associate Professor, and Professor of Mathematics, 1879–95.—Editor of *The Baltimore News.*

Edwin Herbert Hall, (F), A. B., Bowdoin, 1875, Assistant, 1880–81, Instructor and Assistant Professor, Harvard, 1881–95.—Professor of Physics, Harvard.

Allan Marquand, (F), A. B., Princeton, 1874, L. H. D., Hobart, 1888.—Professor of Archæology, etc., Princeton.

Washington Irving Stringham, (F), A. B., Harvard, 1877.—Professor of Mathematics, Univ. of Cal. (5)

1881.

Louis Bevier, (F), A. B., Rutgers, 1878, Instructor and Adjunct Professor, Rutgers, 1881–92.—Professor of Greek, Rutgers.

Robert Dorsey Coale, (F), Assistant, 1881–83.—Professor of Chemistry and Dean of the Medical Faculty, Univ. of Md.

Edward Allen Fay, A. B., Univ. of Mich., 1862.—Vice-President and Professor of Languages, National Deaf-Mute Coll.

Lawrence Bunting Fletcher, (F), A. B., Columbia, 1877, Instructor in Physics, Wesleyan, 1882–83.—Marlboro, N. Y.

Samuel Garner, A. B., St. John's, 1871, Professor, Univ. of Indiana, 1881–87.—Professor of Modern Languages, U. S. Naval Academy.

Edward Mussey Hartwell, (F), A. B., Amherst, 1873, M. D., Miami Med. Coll., 1882, Instructor and Associate, 1883–91, Director of Physical Training, Boston Public Schools, 1891–97.—Secretary, Dept. of Municipal Statistics, Boston.

William Thompson Sedgwick, (F), Ph. B., Yale, 1877, Assistant and Associate, 1880–83.—Professor of Biology, Mass. Inst. of Tech.; Biologist, Mass. Board of Health; Curator, Lowell Inst., Boston.

Christian Sihler, (F), Concordia, 1866, M. D., Univ. of Mich., 1871, Assistant, 1879–80, Instructor and Acting Professor, Western Reserve, 1889–94.—Physician, Cleveland, O.

Edmund Beecher Wilson, (F), Ph. B., Yale, 1878, Assistant, 1881-82, Lecturer, Williams, 1883-84, Associate Professor and Professor, Bryn Mawr, 1885-91.—Professor of Invertebrate Zoölogy, Columbia. (9)

1882.

James Wilson Bright, (F), A. B., Lafayette, 1877, Assistant, 1882-83, Instructor, Associate, and Associate Professor, 1885-93, Instructor, Cornell, 1885.—Professor of English Philology.

John Franklin Jameson, (F), A. B., Amherst, 1879, Assistant and Associate, 1882-88, Lecturer, 1890-91.—Professor of History, Brown Univ.

Mitsuru Kuhara, (F), S. B., Univ. of Tokyo, 1877, Lecturer, Univ. of Tokyo, 1882-87.—Director and Professor of Chemistry, First Middle School, Tokyo.

Robert Wright Mahon, C. E., Lehigh, 1876, Tutor, Lafayette, 1882-83, Acting Professor, Rose Polytech. Inst., 1888-89.—Chemist, McKeesport, Pa.

*Oscar Howard Mitchell, (F), A. B., Marietta, 1875, Professor of Mathematics, Marietta Coll., 1882-89. * *March* 29, 1889.

George Frederick Nicolassen, (F), A. B., Univ. of Virginia, 1879, Assistant, 1881-82.—Professor of Greek and German, Southwestern Presbyterian Univ., Tenn.

William Albert Noyes, A. B., Iowa, 1879, Instructor, Univ. of Minn., 1882-83, Professor, Univ. of Tenn., 1883-86.—Professor of Chemistry, Rose Polytechnic Inst.

Chase Palmer, (F), A. B., 1879, Assistant, Mass. Inst. of Tech., 1882-83, Professor, Mass. Normal School, Salem, 1883-87, Assistant, Tufts Coll., 1887-88, Professor, Wabash Coll., 1888-90.—Professor of Chemistry, Manual Training High School, Louisville, Ky.

Edward Henry Spieker, (F), A. B., 1879, Instructor and Associate, 1882-88.—Associate Professor of Greek and Latin. (9)

1883.

William John Alexander, (F), A. B., London, 1876, Professor, Dalhousie, 1883-89.—Professor of English, Toronto.

William Cathcart Day, (F), A. B., 1880, Professor, St. John's Coll., 1883-84, and Univ. of Nashville, 1884-87.—Professor of Chemistry, Swarthmore Coll.

William Pitt Durfee, (F), A. B., Univ. of Mich., 1876.—Professor of Mathematics and Dean of the Faculty, Hobart Coll.

Kakichi Mitsukuri, (F), Ph. B., Yale, 1879.—Professor of Zoölogy, Univ. of Tokyo.

George Stetson Ely, (F), A. B., Amherst, 1878, Professor of Mathematics, Buchtel, 1883-84.—Examiner, U. S. Patent Office.

Bernard Francis O'Connor, (F), B. ès Lett., Univ. of France, 1874, Instructor and Adjunct Professor of Romance Languages, Columbia, 1883-91.—New York City. (6)

1884.

Herbert William Conn, A. B., Boston Univ., 1881, Assistant, 1883-84.—Professor of Biology, Wesleyan Univ., Conn.

Ellery William Davis, (F), S. B., Univ. of Wis., 1879, Professor, Florida Agric. Coll., 1884-88, and Univ. of S. C., 1888-93.—Professor of Mathematics, Univ. of Neb.

David Talbot Day, (F), A. B., 1881.—U. S. Geol. Survey, Washington.

John Dewey, (F), A. B., Univ. of Vt., 1879, Instructor and Professor, Univ. of Mich., 1884-94.—Professor of Philosophy, Univ. of Chicago.

*James Reynolds Duggan, (F), A. B., Mercer, 1877, M. D., Jefferson Med. Coll., 1879, Professor of Chemistry, Wake Forest, 1886-88. **January* 10, 1888.

William Henry Howell, (F), A. B., 1881, M. D., Univ. of Mich., 1890, Assistant, Associate, and Associate Professor, 1884-89, Lecturer and Professor, Univ. of Mich., 1889-92, Associate Professor, Harvard, 1892-93.—Professor of Physiology.

Hans Carl Günther von Jagemann, (F), Naumburg Gymnas., 1876, Professor, Earlham, 1884-85, and Indiana Univ., 1885-89.—Assistant Professor of German, Harvard.

Edward Harrison Keiser, (F), S. B., Swarthmore, 1880, Assistant, 1884-85.—Professor of Chemistry, Bryn Mawr.

Arthur Lalanne Kimball, (F), A. B., Princeton, 1891, Associate and Associate Professor, 1884-91.—Professor of Physics, Amherst.

Henry Leslie Osborn, (F), A. B., Wesleyan, 1878, Professor, Purdue Univ., 1884-87.—Professor of Biology and Geology, Hamline Univ.

Charles Albert Perkins, (F), A. B., Williams, 1879, Assistant, 1884-87, Associate, Bryn Mawr, 1887-91, Professor, Hampden Sidney, 1891-92.—Professor of Physics, etc., Univ. of Tenn.

Albert Shaw, A. B., Iowa, 1879, Reader, 1889-90, Lecturer, 1891-92.—American Editor, *The Review of Reviews.*

Henry Newlin Stokes, (F), S. B., Haverford, 1879, Assistant Professor of Chemistry, Univ. of Chicago, 1893-94.—U. S. Geological Survey, Washington, D. C.

Louis Webb Wilhelm, (F), A. B., 1880.—Mathematical Instructor, Baltimore.

Arthur Yager, A. B., Georgetown, Ky., 1879.—Professor of History, Georgetown. (15)

1885.

Edward Webster Bemis, A. B., Amherst, 1880, Instructor, Amherst, 1885-86, Adjunct Professor, Vanderbilt, 1886-92, Associate Professor, Univ. of Chicago, 1892-95.—Associate Editor, *Bibliotheca Sacra*, Oberlin, O.

Gustav Bissing, (F), A. B., 1882, Examiner, U. S. Patent Office, 1884-97.—Patent Lawyer, Washington.

Henry Herbert Donaldson, (F), A. B., Yale, 1879, Assistant, 1883-84, Instructor and Associate, 1885-89, Assistant Professor, Clark Univ., 1889-92.—Professor of Neurology, Univ. of Chicago.

Louis Duncan, U. S. Naval Academy, 1880, Associate, 1886-89.—Associate Professor of Electricity.

Homer Winthrop Hillyer, (F), S. B., Univ. of Wis., 1882, Instructor, Univ. of Wis., 1885-90.—Assistant Professor of Organic Chemistry, Univ. of Wisconsin.

Frederic Schiller Lee, (F), A. B., St. Lawrence Univ., 1878, Instructor, St. Lawrence, 1886-87, Associate, Bryn Mawr, 1887-91.—Adjunct Professor and Demonstrator of Physiology, Columbia.

*Gustav Adolph Liebig, Jr., (F), A. B., 1882, Assistant, 1887-90. **February* 10, 1897.

James Playfair McMurrich, A. B., Toronto, 1879, Instructor, 1884-86, Professor, Haverford, 1886-89, Instructor, Clark, 1889-91, Professor, Univ. of Cincinnati, 1891-94.—Professor of Anatomy, Univ. of Mich.

Albert Gallatin Palmer, (F), A. B., 1882, Assistant and Assistant Professor, Swarthmore, 1885-87.—Norwood, Md.

Harry Fielding Reid, (F), A. B., 1880, Assistant, 1882-84, Lecturer, 1894-96, Professor, Case School, 1886-94, Associate Professor, Univ. of Chicago, 1895-97.—Associate Professor of Geological Physics.

Henry Alford Short, A. B., Columbia, 1880, Tutor, Columbia, 1885-88.—New York.

Morrison Isaac Swift, (F), A. B., Williams, 1879, Instructor in Philosophy, Hobart Coll., 1882-84.

Henry Alfred Todd, A. B., Princeton, 1876, Instructor and Associate, 1883-91, Professor, Stanford Univ., 1891-93.—Professor of Romance Philol., Columbia. (13)

1886.

William Shirley Bayley, (F), A. B., 1883.—U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.

*Adam Todd Bruce, (F), A. B., Princeton, 1881, Instructor in Osteology, etc., 1886-87. **February* 9, 1887.

Davis Rich Dewey, (F), A. B., Univ. of Vt., 1879, Lecturer, 1895-96.—Instructor (1886-88) and (now) Professor of Economics, etc., Mass. Institute of Technology.

William Henry Emerson, (F), U. S. Naval Acad., 1880, Professor, S. C. Military Acad., 1886-88.—Professor of Chemistry, Georgia School of Technology, Atlanta.

Joseph Auguste Fontaine, College of Sion, France, 1879, Instructor, Univ. of Neb., 1887-89, Professor, Univ. of Miss., 1889-91.—Professor of Romance Languages, Bryn Mawr.

Elgin Ralston Lovell Gould, (F), A. B., Victoria (Ont.), 1881, Instructor, Washington High School, 1884-87, Reader, 1887-89, Lecturer, 1892-97, Professor, Univ. of Chicago, 1895-96.—President, City and Suburban Homes Company, New York.

William Penn Holcomb, B. L., Swarthmore, 1878, Professor of History, etc., Swarthmore, 1886-94.—Pearl River, N. Y.

Joseph Jastrow, (F), A. B., Univ. of Pa., 1882.—Professor of Experimental Psychology, Univ. of Wisconsin.

George Theophilus Kemp, (F), A. B., 1883, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886-87, Associate and Associate Director, etc., Hoagland Lab., 1888-93.—Professor of Physiology, Univ. of Illinois.

Charles Herbert Levermore, (F), A. B., Yale, 1879, Instructor, Univ. of Cal., 1886-88, Professor of History, Mass. Inst. of Tech., 1888-93.—President, Adelphi Coll., Brooklyn.

Gonzalez Lodge, (F), A. B., 1883, Professor, Davidson Coll., 1886-88.—Professor of Latin, Bryn Mawr.

Charles William Emil Miller, (F), A. B., 1882, Professor, Peoria (Ill.) High School, 1888-90, and Walther Coll., St. Louis, 1890-91.—Associate Professor of Greek.

Henry Barber Nixon, (F), Univ. of N. C., 1878.—Professor of Mathematics, Pennsylvania Coll.

Charles Skeele Palmer, (F), A. B., Amherst, 1879.—Professor of Chemistry, Univ. of Colorado.

Burr James Ramage, A. B., Newberry, 1880.—Professor of Common Law and Dean of the Law School, Univ. of the South.

Shosuke Sato, S. B., Sapporo Agric. Coll., 1880.—Acting Director and Professor of Agricultural Economics, Imperial Coll. of Agriculture, Sapporo, Japan.

Woodrow Wilson, (F), A. B., Princeton, 1876, LL. D., Wake Forest, 1887, Associate and Associate Professor, Bryn Mawr, 1885-88, Professor, Wesleyan Univ., 1888-90.—Professor of Jurisprudence, etc., Princeton; Lecturer, New York Law School; Lecturer in Political Science. (17)

1887.

Cyrus Adler, (F), A. B., Univ. of Pa., 1883, Instructor, 1887-90, Associate, 1890-93.—Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian Univ.

Ethan Allen Andrews, (F), Ph. B., Yale, 1881, Instructor and Associate, 1887-92.—Associate Professor of Biology.

Rev. Albert Clayton Applegarth, A. B., 1884.—Clergyman, Chester, Pa.

*David Barcroft, (F), Ph. B., Univ. of Cal., 1882. **August* 2, 1894.

Henry Gustav Beyer, M. D., Bellevue Hospital Med. Coll, 1876, M. R. C. S. (London), Director of Physical Training, U. S. Naval Academy, 1891-95.—Surgeon, U. S. N.

Richard Newman Brackett, A. B., Davidson, 1883.—Associate Professor of Chemistry, Clemson Agric. Coll., S. C.

Henry Crew, (F), A. B., Princeton, 1882, Assistant, 1887-88, Instructor, Haverford, 1888-91.—Professor of Physics, Northwestern Univ.

Albert E. Egge (F), A. B., Luther Coll., 1879, Professor, St. Olaf Coll., 1887-92, Instructor, Iowa Univ., 1892-96.—Professor of English, Washington Agric. Coll.

John Charles Fields, (F), A. B., Toronto, 1884.—Professor of Mathematics, Allegheny Coll.

Andrew Fossum, A. B., Luther, 1882.—Professor of Greek, St. Olaf Coll.

Richmond Harding, A. B., Davidson, 1880.—Professor of Greek, Davidson Coll.

Charles Willard Hayes, (F), A. B., Oberlin, 1883.—U. S. Geol. Survey, Washington.

William Adam Hedrick, A. M., Columbian, 1884.—Instructor in the High School, Washington, D. C.

Frank Gaylord Hubbard, A. B., Williams, 1880, Instructor, Smith Coll., 1887-88, and Univ. of Cal., 1888-92.—Assoc. Professor of English Philology, Univ. of Wis.

George Benjamin Hussey, (F), A. B., Columbia, 1884, Fellow of Princeton, 1888-90, Instructor and Assoc. Professor, Univ. of Neb., 1891-94.—Docent, Univ. of Chicago.

James Hervey Hyslop, (F), A. B., Wooster, 1877, Instructor, Bucknell, 1888-89.—Professor of Logic and Ethics, Columbia.

Marion Dexter Learned, (F), A. B., Dickinson, 1880, Instructor, Associate, and Assoc. Professor, 1886-95.—Professor of German, Univ. of Pa.

William Ridgely Orndorff, (F), A. B., 1884.—Asst. Professor of Organic Chemistry, Cornell Univ.

Daniel Richard Randall (F), A. B., St. John's, 1883.—Attorney at Law, Annapolis.

Frederick Morris Warren, A. B., Amherst, 1880, Instructor and Associate, 1886-91.—Professor of Romance Lang., Adelbert; Lecturer in French Literature. (20)

1888.

William Muss Arnolt, (F), B. D., New Brunswick Theol. Sem., 1882, Instructor, 1891-93, Asst. Professor, Univ. of Mich., 1893-94.—Instructor and Asst. Recorder, Univ. of Chicago.

Philip Wheelock Ayres, (F), Ph. B., Cornell, 1884.—Secretary, Organized Charities, Chicago, Ill.

Louis Bell, (F), A. B., Dartmouth, 1884, Professor of Physics, etc., Purdue Univ., 1888-89.—Chief Engineer, General Electric Company, Chicago, Ill.

Benjamin Lester Bowen, A. B., Rochester, 1881, Professor, Bowdoin, 1888-89.—Professor of Romance Lang., Ohio State Univ.

William Henry Burnham, (F), A. B., Harvard, 1882, Instructor, 1888–89.—Instructor in Pedagogy, Clark Univ.

Richard Eugene Burton, A. B., Trinity (Conn.), 1883.—Editor of *The Courant*, Hartford; Lecturer in English Literature, 1897–98.

John Pendleton Campbell, (F), A. B., 1885. —Professor of Biology, Univ. of Ga.

Herbert Charles Elmer, (F), A. B., Cornell, 1883.—Asst. Professor of Latin, Cornell.

Robert Orlando Graham, A. B., Amherst, 1877.—Professor of Chemistry and Geology, Illinois Wesleyan.

Erasmus Haworth, S. B., Kansas State Univ., 1881, Professor in Oskaloosa Coll., 1882–92.—Assoc. Professor of Organic Geology, Kansas State Univ.

Francis Hobart Herrick, A. B., Dartmouth, 1881.—Professor of Biology, Adelbert.

William Herbert Hobbs, (F), S. B., Worcester Polytechnic, 1883.—Asst. Professor of Mineralogy, etc., Univ. of Wis.

Joseph Hoeing Kastle, (F), S. B., Ky. State Coll., 1884.—Professor of Chemistry, Ky. State Coll.

Andrew Cowper Lawson, (F), A. B., Toronto, 1883.—Asst. Professor of Geology and Mineralogy, Univ. of Cal.

Felix Lengfeld, (F), Professor, S. Dakota School of Mines, 1890–91, Instructor, Univ. of Cal., 1891–92.—Asst. Professor of Chemistry, Univ. of Chicago.

Archibald Byron Macallum, A. B., Toronto, 1880.—Assoc. Professor of Physiology, Univ. of Toronto.

John Ernst Matzke, A. B., Hope Coll., 1882, Professor, Bowdoin Coll., 1889–90, and Indiana Univ., 1890–91, Associate, 1891–93.—Professor of Romanic Languages, Stanford Univ.

*Thomas McCabe, (F), A. B., 1886, Instructor, Univ. of Mich., 1888–89, Professor, Indiana Univ., 1889–90, Associate in Romance Languages, Bryn Mawr Coll., 1890–91. * *February* 22, 1891.

Yujiro Motora, (F), Doshisha Kioto, Japan, 1879.—Professor of Psychology, etc., Univ. of Tokyo.

Julius Nelson, (F), S. B., Univ. of Wisconsin, 1881.—Professor of Biology, Rutgers.

George Thomas White Patrick, (F), A. B., Iowa Univ, 1878, B. D., Yale, 1885.—Professor of Philosophy, Iowa State Univ.

Edmund Clark Sanford, (F), A. B., Univ. of Cal., 1883, Instructor, 1888–89.—Asst. Professor of Psychology, Clark Univ.

Henry Taber, Ph. B., Yale, 1882, Assistant, 1888–89.—Asst. Professor of Mathematics, Clark Univ.

Amos Griswold Warner, (F), B. L., Univ. of Neb., 1885, General Agent, Charity Organization Society, Balt., 1887–89, Professor, Univ. of Neb., 1889–91, Superintendent of Charities in the District of Columbia, 1891–93, Lecturer, 1892–93.—Professor of Economics, Stanford Univ.

John Roaf Wightman, (F), A. B., Toronto, 1871, Professor, Iowa Coll., 1889–91; Assoc. Professor, Univ. of Neb., 1891–93.—Professor of Romance Lang., Oberlin.

Henry Van Peters Wilson, (F), A. B., 1883, Bruce Fellow, 1888–89.—Professor of Biology, Univ. of N. C.

Thomas Kimber Worthington, A. B., Haverford, 1883, LL. B., Univ. of Md., 1890.—Baltimore. (27)

1889.

Charles McLean Andrews, (F), A. B., Trinity (Conn.), 1884.—Assoc. Professor of History, Bryn Mawr.

Frank Wilson Blackmar, (F), Ph. B., Univ. of the Pacific, 1881.—Professor of History and Sociology, Univ. of Kansas.

Jeffrey Richardson Brackett, A. B., Harvard, 1883.—Baltimore.

William Merriam Burton, (F), A. B., Adelbert, 1886.—Superintendent, Standard Oil Company, Whiting, Ind.

Morgan Callaway, Jr., (F), A. B., Emory (Ga.), 1881, Professor, Southwestern Univ., 1889–90.—Assoc. Professor of English, Univ. of Texas.

Alfred Robert Louis Dohme, A. B., 1886.—Chemist, Baltimore.

*William Curns Lawrence Gorton, (F), A. B., 1886, Assoc. Professor and Professor of Mathematics, Woman's Coll., Balt., 1888–94. * *November* 8, 1894.

Joseph Edward Harry, (F), A. B., 1886.—Professor of Greek and German, Georgetown Coll., Ky.

George Allison Hench, (F), A. B., Lafayette, 1885.—Professor of German, Univ. of Mich.

Clifton Fremont Hodge, (F), A. B., Ripon, 1882, Instructor, Univ. of Wis., 1891–92.—Asst. Professor of Physiology, etc., Clark Univ.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886.—Consulting Electrical Engineer, N. Y.

James Thomas Lees, A. B., Adelbert, 1886. —Professor of Greek, Univ. of Neb.

Archibald MacMechan, (F), A. B., Toronto, 1884.—Professor of English, Dalhousie.

Charles William Moulton, A. B., Univ. of Minn., 1885.—Professor of Chemistry, Vassar Coll.

Albion Woodbury Small, A. B., Colby, 1876. Reader, 1888-89, President of Colby Univ., 1889-92.—Professor of Sociology, Univ. of Chicago.

Charles Lee Smith, (F), S. B., Wake Forest, 1884, Instructor, 1889-91, General Secretary, Charity Organization Society of Baltimore, 1889-91.—Professor of History, William Jewell Coll., Mo.

Kirby Flower Smith, A. B., Univ. of Vt., 1884, Instructor and Associate, 1889-93.—Assoc. Professor of Latin.

Rev. Lemon Leander Uhl, A. B., Wittenberg (Ohio), 1871.—Missionary in British India.

Arthur Clarence Wightman, (F), A. B., Wofford, 1879, Demonstrator, 1889-90, Professor in Md. Agric. Coll., 1890-91.—Adjunct Professor of Biology and Physics, Randolph Macon Coll.

* William Klapp Williams, A. B., 1886.—* *June* 4, 1897. (20)

1890.

Joseph Sweetman Ames, (F), A. B., 1886, Assistant and Associate, 1889-93.—Assoc. Professor of Physics.

Edward Carey Applegarth, (F), A. B., 1887, M. D., Coll. of Phys. and Surg., Balt., 1892.—Physician, Balt.

Charles Cotton Blackshear, A. B., Mercer, 1881, Instructor, Bryn Mawr, 1890-91.—Assoc. Professor of Chemistry, Woman's Coll., Balt.

Charles Hiram Chapman, (F), A. B., 1888, Instructor and Associate, 1889-92.—President, Univ. of Oregon.

Rudolf John Julius de Roode, Jr., (F), S. B., Ky. State Coll., 1885.—Analytical Chemist, New York City.

George Peter Dreyer, (F), A. B., 1887, Demonstrator, 1890-92.—Associate in Biology.

Edwin Whitfield Fay, (F), A. M., Southwestern Presbyterian Univ., 1883, Instructor, Univ. of Mich., 1890-91, Acting Professor, Univ. of Texas, 1892-93.—Professor of Latin, Washington and Lee.

Henry Torsey Fernald, S. B., Maine State Coll., 1885.—Professor of Zoölogy, Pa. State Coll.

Henry Brayton Gardner, (F), A. B., Brown, 1884.—Associate Professor of Political Economy, Brown Univ.

Charles Jaques Goodwin, (F), A. B., Bowdoin, 1887, Professor, Cornell Coll., 1890-92, Tutor, Wesleyan Univ., 1892-95.

Charles Homer Haskins, A. B., 1887, Instructor, 1889-90.—Professor of Institutional History, Univ. of Wisconsin.

James Taft Hatfield, (F), A. B., Northwestern, 1883.—Professor of German, Northwestern Univ.

John Cohn Hemmeter, M. D., Univ. of Md., 1883.—Clinical Professor of Medicine, Univ. of Md.; Physician, Balt.

Charles Holmes Herty, Ph. B., Univ. of Ga., 1886.—Adjunct Professor of Chemistry, Univ. of Ga.

Jesse Herman Holmes, A. B., Univ. of Neb., 1884.—Instructor in Chemistry and Physics, Newtown, Pa.

Abel Henry Huizinga, (F), A. B., Hope Coll., 1880, Adjunct Professor, McCormick Theol. Sem., 1894-96.—Clergyman, Fishkill, N. Y.

Toyokichi Iyenaga, Ph. B., Oberlin, 1887.—Professor of Political Science, Semmo Gakko, Tokyo.

Thomas Logie, (F), A. B., Toronto, 1887, Asst. Professor, Williams Coll., 1890-93.—Assoc. Professor of Romance Lang., Rutgers.

Hiram Benjamin Loomis, (F), A. B., Trinity (Conn.), 1885, Instructor, Univ. of Wis., 1890-93.—Instructor in Physics, Academy of Northwestern Univ.

Herbert William Magoun, (F), A. B. Iowa, 1879, Acting Professor, Colo. Coll., 1890-91, Acting Professor, Oberlin, 1892-95.—Oberlin, O.

John Hanson Thomas McPherson, (F), A. B., 1886, Instructor, Univ. of Mich., 1890-91.—Professor of History, Univ. of Ga.

Wilmot Vernon Metcalf, A. B., Oberlin, 1883. —Professor of Chemistry and Physics, Carleton Coll.

Thomas Hunt Morgan, (F), S. B., Ky. State Coll., 1886, Bruce Fellow, 1890-91. —Professor of Biology, Bryn Mawr.

Augustus Taber Murray, (F), A. B., Haverford, 1885, Professor, Earlham Coll., 1888-91, and Colorado Coll., 1891-92.—Professor of Greek, Stanford Univ.

Wyatt William Randall, A. B., St. John's, 1884.—Associate in Chemistry.

George Mann Richardson, (F), A. C., Lehigh, 1886, Instructor, Lehigh, 1890-91.—Professor of Organic Chemistry, Stanford.

Joseph Samuel Shefloe, (F), A. B., Luther, 1885.—Professor of Romance Lang. and Librarian, Woman's College of Baltimore.

Robert Benson Steele, (F), A. B., Univ. of Wis., 1883, Professor, St. Olaf Coll., 1890-91.—Professor of Latin, Illinois Wesleyan.

Andrew Stephenson, A. B., De Pauw, 1882, Assoc. Professor, Wesleyan, 1890-94.—Professor of History, De Pauw Univ.

Frederick Jackson Turner, A. B., Univ. of Wis., 1884.—Professor of American History, Univ. of Wis.

John Martin Vincent, A. B., Oberlin, 1883, Instructor and Associate, 1890-95.—Assoc. Professor of History.

Shozaburo Watase, (F), S. B., Sapporo Agric. Coll., 1884, Bruce Fellow, 1889-90, Lecturer and Assistant, Clark Univ., 1890-92.—Assistant Professor of Cellular Biology, Univ. of Chicago.

James Albert Woodburn, (F), A. B., Indiana Univ., 1876.—Professor of American History, Indiana Univ. (33)

1891.

Alfred Bagby, Jr., A. B., Richmond, 1885, Adjunct Professor, S. C. Univ., 1891-93.—Attorney at Law, Baltimore.

James William Black, A. B., 1888, Acting Professor, Georgetown Coll., Ky., 1891-92, Assoc. Professor, Oberlin, 1892-94.—Professor of History, etc., Colby Univ.

Charles Pliny Brigham, A. B., 1888.—Greenport, Long Island.

Charles Edward Coates, Jr., A. B., 1887, Professor, St. John's, Md., 1891-93.—Professor of Chemistry, La. State Univ.

Edwin Grant Conklin, (F), S. B., Ohio Wesleyan, 1885, Professor, Ohio Wesleyan, 1891-94, and Northwestern Univ. 1894-95.—Professor of Comparative Embryology, Univ. of Pa.

Paul Joseph Dashiell, A. B., 1887, Instructor, Lehigh, 1889-90, 1891-92.—Professor of Chemistry, U. S. Naval Academy.

Hermann Louis Ebeling, (F), A. B., 1882.—Professor of Greek, Miami Univ.

William Snyder Eichelberger, (F), A. B., 1886, Instructor in Mathematics, etc., Wesleyan Univ., 1891-96.—U. S. Nautical Almanac, Washington.

Thomas Perrin Harrison, (F), S. C. Military Acad., 1886, Assoc. Professor, Clemson Agric. Coll., 1891-95.—Professor of English, Davidson.

Walter Jones, A. B., 1888, Acting Professor, Wittenberg Coll., 1891-92, Instructor and Professor, Purdue Univ., 1892-95.—Asst. in Physiological Chemistry.

Henry Parker Manning, (F), A. B., Brown, 1883.—Asst. Professor of Pure Mathematics, Brown Univ.

George Frederick Metzler, A. B., Albert Coll., 1880, Instructor, Univ. of Mich., 1892-93, and Queen's Univ., Ont., 1895-96.—Odessa, Ont.

William McCracken Milroy, A. B., Geneva Coll., 1887.—Professor of Latin, Geneva.

John Leverett Moore, (F), A. B., Princeton, 1881, Tutor, Princeton, 1882-85, Instructor, 1888-89.—Professor of Latin, Vassar.

Wilfred Pirt Mustard, (F), A. B., Toronto, 1886, Professor, Colorado Coll., 1891-93.—Professor of Latin, Haverford College.

Barker Newhall, (F), A. B., Haverford, 1887, Instructor, Brown Univ., 1892-95, and Bates Coll. (Me.), 1895-96.—Classical Instructor, Monson, Mass.

George Petrie, A. M., Univ. of Virginia, 1887.—Professor of History, Alabama Polytechnic Inst.

Edward Bennett Rosa, (F), S. B., Wesleyan, Conn., 1886.—Professor of Physics, Wesleyan University.

Edward Alsworth Ross, A. B., Coe Coll., 1886, Professor, Indiana Univ., 1891-92, Assoc. Professor, Cornell, 1892-93.—Professor of Economic Theory and Finance, Stanford Univ.

Charles Edward Saunders, (F), A. B., Toronto, 1888, Professor, Central Univ., Ky., 1891-93.—Ottawa, Canada.

Sidney Sherwood, A. B., Princeton, 1879, Instructor, Univ. of Pa., 1891-92, Assoc., 1892-95.—Assoc. Professor of Political Economy.

Moses Slaughter, (F), A. B., Indiana Asbury, 1883, Instructor, Bryn Mawr, 1887-88, Professor, Iowa Coll., 1889-96.—Professor of Latin, Univ. of Wis.

Bernard Christian Steiner, (F), A. B., Yale, 1888, LL. B., Univ. of Maryland, 1894, Instructor, Williams, 1891-92.—Librarian, Enoch Pratt Free Library, Baltimore; Professor and Dean, Balt. Univ. School of Law; Associate in History.

William Howe Tolman, A. B., Brown, 1882.—General Agent, Poor Association, N. Y.

Stephen Beauregard Weeks, A. B., Univ. of N. C., 1886, Professor, Trinity Coll., N. C., 1891-93.—Editor, U. S. Bureau of Education.

John White, Jr., (F), A. B., 1888, Assistant, Cornell, 1891-93.—Instructor in Chemistry, Univ. of Neb.

Westel Woodbury Willoughby, (F), A. B., 1888, Acting Asst. Professor, Stanford Univ., 1894-95.—Attorney at Law, Washington; Associate in Political Science.

Arthur Burnham Woodford, Ph. B., Yale, 1881, Instructor, Univ. of Pa., 1891-92.—Professor, Coll. of Social Economics, New York; Lecturer, New York Univ.

(28)

1892.

Eugene Thomas Allen, A. B., Amherst, 1887, Acting Professor, Univ. of Colo., 1892-93, Assistant, Harvard, 1894-95.

William Wilson Baden, (F), A. B., 1881, LL. B., Univ. of Md., 1883, Professor of Greek, Southwestern Univ., 1892-93, and Central Univ., 1893-96.

Robert Payne Bigelow, (F), S. B., Harvard, 1887, Bruce Fellow, 1891-93.—Instructor in Biology and Librarian, Mass. Inst. of Tech.; Editor in Chief, *American Naturalist.*

Edwin Winfield Bowen, A. B., Randolph Macon, 1887, Asst. Professor, Univ. of Missouri, 1892-93.—Professor of Latin, Randolph Macon Coll.

Immanuel Moses Casanowicz.—U. S. National Museum, Washington.

Starr Willard Cutting, A. B., Williams, 1887. —Assoc. Professor of German, Univ. of Chicago.

Rev. William Levering Devries, (F), A. B., 1888, B. D., General Theol. Sem., N. Y., 1894.—Clergyman, Washington, D. C.

Albert Bernhardt Faust, (F), A. B., 1889, Instructor, 1894-96.—Assoc. Professor of German, Wesleyan Univ.

George Wilton Field, A. B., Brown, 1887, Assoc. Professor, Brown Univ., 1893-96.—Biologist, R. I. Agric. Exper. Station.

Joseph Elliott Gilpin, A. B., 1889.—Instructor in Chemistry.

John Leslie Hall, (F).—Professor of English and History, William and Mary Coll.

William Asbury Harris, (F), A. M., Richmond, 1886, Acting Professor, Ripon, 1892-93.—Professor of Greek, Baylor Univ.

Frederick Clemson Howe, A. B., Allegheny Coll., 1889.—Attorney at Law, Cleveland.

William Isaac Hull, A. B., 1889.—Professor of History, etc., Swarthmore Coll.

Harry Clary Jones, (F), A. B., 1889.—Instructor in Physical Chemistry.

James Lawrence Kellogg, (F), S. B., Olivet, 1888.—Professor of Biology, Olivet Coll.

Charles Rollin Keyes, (F), S. B., Iowa State Univ., 1887, late State Geologist of Missouri.

Elmer Peter Kohler, (F), A. B., Muhlenberg, 1886.—Associate in Chemistry, Bryn Mawr.

*Paul Erasmus Lauer, (F), A. B., Adelbert, 1885, Assistant Supt. of Schools, Cleveland, 1892-93. **February* 20, 1893.

Edwin Seelye Lewis, (F), A. B., Wabash, 1888.—Asst. Professor of Romance Lang., Princeton.

David Judson Lingle, (F), S. B., Chicago, 1885.—Instructor in Physiology, Univ. of Chicago.

Alvin Frank Linn, (F), A. B., Wittenberg, 1884.—Professor of Chemistry and Mineralogy, Wittenberg Coll.

James Alexander Lyman, A. B., Beloit, 1888, Docent, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Portland Academy, Oregon.

John Hanson Thomas Main, (F), A. B., Moore's Hill, 1880.—Professor of Greek, Iowa Coll.

Frank Jewett Mather, Jr., (F), A. B., Williams, 1889.—Instructor in English, Williams Coll.

Michael Andrew Mikkelsen, (F), A. B., Luther, 1886.—Montclair, N. J.

Robert Milton Parks, Jr., A. B., Indiana Univ., 1879, Professor, Furman Univ., 1892-93,—Professor of Chemistry, Central Univ., Ky.

Charles Lane Poor, (F), S. B., Coll. of the City of New York, 1886, Instructor and Associate, 1891-95.—Assoc. Professor of Astronomy.

John Dyneley Prince, (F), A. B., Columbia, 1888.—Professor of Semitic Lang., New York Univ.

John Cunningham Robertson, (F), A. M., Univ. of Va., 1885.—Professor of Greek, St. Stephen's Coll., N. Y.

Charles Hunter Ross, (F), S. B., Ala. Agric., 1886.—Professor of Modern Lang., Ala. Polytechnic Inst.

Harry Luman Russell, S. B., Univ. of Wis., 1888.—Asst. Professor of Bacteriology, Univ. of Wis.

William Amasa Scott, A. B., Univ. of Rochester, 1886.—Professor of Economic History and Theory, Univ. of Wis.

Will Bush Shober, A. B., St. John's, 1885, Instructor in Chemistry, Lehigh Univ., 1892-96.—Cumberland, Md.

Martin Bell Stubbs, A. B., Haverford, 1888. —Chemist, La Salle, Ill.

Harry Maas Ullmann, A. B., 1889, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh.

Bert John Vos, (F), A. B., Univ. of Mich., 1888, Instructor, Univ. of Chicago, 1892-93.—Associate in German. (37)

1893.

Henry Harold Ballard, A. B., 1888, Instructor in Chemistry, Rose Polytech. Inst., 1893-96.—Science Master, Country School for Boys, Balt.

Florence Bascom, S. B., Univ. of Wis., 1884, Instructor, Ohio State Univ., 1893-95.—Lecturer in Geology, Bryn Mawr.

Jasper Luther Beeson, A. B., Univ. of Ala., 1889.—Acting Professor of Sciences, Bethel Coll., Ky.

Alexander Mitchell Carroll, (F), A. M., Richmond, 1888, Professor of Greek, Richmond Coll., 1895-97.—Europe.

Andrew Fuller Craven, A. B., Harvard, 1889, LL. B., Univ. of Chicago, 1870.—Professor of Economics, Columbian Univ.

John Bascom Crenshaw, A. M., Randolph Macon, 1881.—Instructor in Physical Culture.

Ulysses Sherman Grant, (F), S. B., Univ. of Minn., 1888.—Asst. State Geologist, Minneapolis.

David I. Green, A. B., Alfred Univ., 1885.—Superintendent, Organized Charities, Hartford, Conn.

William Richard Grey, A. B., Davidson, 1884.—Professor of Latin and French, Davidson Coll.

George Henry Haynes, A. B., Amherst, 1887.—Professor of History and Political Science, Worcester Polytech. Inst.

Charles Downer Hazen, A. B., Dartmouth, 1889.—Professor of History, Smith Coll.

Frank Irving Herriott, A. B., Iowa, 1890.—Professor of Economics, Iowa Coll.

David Hull Holmes, (F), A. B., Ohio Wesleyan, 1885, Acting Professor, Allegheny Coll., 1893-94, Professor, Univ. of Kansas, 1896-97.—Latin Master, Sachs's Collegiate Inst., N. Y.

Arthur John Hopkins, (F), A. B., Amherst, 1885, Professor, Westminster Coll., 1893-94.—Asst. Professor of Chemistry, Amherst.

Theodore Hough, (F), A. B., 1886, Instructor, McDonogh School, 1886-89.—Asst. Professor of Biology, Mass. Inst. of Tech.

James Alton James, (F), B. L., Univ. of Wis., 1888.—Professor of History, Cornell Coll., Iowa.

Henry Read McIlwaine, A. B., Hampden Sidney, 1884.—Professor of English and History, Hampden Sidney Coll.

Louis Emil Menger, (F), A. B., Mississippi Coll., 1888, Instructor and Associate, 1893-97.—Assoc. Professor of Romance Philol., Bryn Mawr.

Colyer Meriwether, A. B., 1886, Instructor in Sendai, Japan, 1889-92.—Instructor, Washington High School.

*Lucius Salisbury Merriam, (F), S. B., Vanderbilt, 1889, Instructor in Political Economy, Cornell, 1893. **November* 18, 1893.

Maynard Mayo Metcalf, (F), A. B., Oberlin, 1889, Bruce Fellow, 1893.—Professor of Biology, Woman's Coll., Balt.

Daniel Alexander Murray, (F), A. B., Dalhousie, 1881, Assoc. Professor, New York Univ., 1890-94.—Instructor in Mathematics, Cornell.

William Peters Reeves, A. B., 1889, Assistant, Union Coll., 1895-97.—Instructor in English, Iowa State Univ.

Charles Alphonso Smith, A. B., Davidson, 1884.—Professor of English, La. State Univ.

George Owen Squier, (F), U. S. Mil. Acad., 1887.—First Lieut., U. S. A.; Instructor, Artillery School, Fortress Monroe.

John Nesbit Swan, A. B., Westminster Coll., Pa., 1886.—Professor of Chemistry, Monmouth Coll.

Frederick Tupper, Jr., (F), A. B., Charleston, 1890, Professor, Wells Coll., 1893-94. —Professor of English, Univ. of Vt.

Frank Alfred Wolff, Jr., (F), A. B., 1890.—Chemist, Dept. of Agric., Washington. (28)

1894.

James Nesbit Anderson, A. M., Univ. of Va., 1887, Professor of Latin and Greek, Univ. of Oklahoma, 1894-96.

John Spencer Bassett, (F), A. B., Trinity (N. C.), 1888.—Professor of History, Trinity Coll., N. C.

William Julian Albert Bliss, A.B., Harvard, 1888, Assistant, 1890-91, 1895-97, Lecturer, 1894-95, Instructor, Woman's Coll., Balt., 1894-95.—Associate in Physics.

James Douglas Bruce, A. M., Univ. of Va., 1883.—Assoc. Professor of English Philology, Bryn Mawr.

James Dowden Bruner, A. B., Franklin Coll., 1888, Professor, Univ. of Ill., 1893-95.—Asst. Professor of Romance Lang., Univ. of Chicago.

John Emery Bucher, A. C., Lehigh, 1891, Instructor, Tufts Coll., 1894-97.—Asst. Professor of Chemistry, Rhode Island Agric. Coll.

Frank Kenneth Cameron, A. B., 1891, Asst. Professor, Catholic Univ., 1895-97.—Assistant in Physical Chemistry, Cornell.

William Embert Chamberlin, A. B., Oberlin, 1887, Instructor, Wabash Coll., 1894-95.—Chemist, New York City.

Abraham Cohen, (F), A. B., 1891.—Instructor in Mathematics.

Louis Leaming Forman, A. M., Univ. of Pa., 1890.—Instructor in Greek, Cornell.

Edward Curtis Franklin, S. B., Univ. of Kan., 1888.—Assoc. Professor of Chemistry, Univ. of Kansas.

Joseph Hendren Gorrell, A. B., Washington and Lee, 1888.—Professor of Modern Languages, Wake Forest Coll.

George Perry Grimsley, A. B., Ohio State Univ., 1890.—Professor of Geology, etc., Washburn Coll.

Ross Granville Harrison, (F), A. B., 1889, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894-95.—Associate in Anatomy.

Robert Nelson Hartman, A. B., Pa. Coll., 1891.—Instructor in Chemistry, Tufts.

Jacob H. Hollander, (F), A. B., 1891, Sec., Special Monetary Commission of the U. S., 1897.—Associate in Economics.

Lorrain Sherman Hulburt, A. B., Univ. of Wis., 1883, Professor, Univ. of S. Dakota, 1887-91, Fellow, Clark Univ., 1891-92, Instructor and Associate, 1892-97.—Collegiate Professor of Mathematics.

Masanobu Ishizaka, Ph. B., Albion Coll., 1891.—Lecturer in History and Economics, Mie-Ji-Gaku-In, Tokio.

Thomas Atkinson Jenkins, A. B., Swarthmore, 1887.—Instructor in Romance Languages, Vanderbilt.

Christopher Johnston, (F), A. M., Univ. of Va., 1879, M. D., Univ. of Md., 1880, Instructor, 1891-94.—Associate in the Semitic Languages.

Emory Bair Lease, (F), A. B., Ohio Wesleyan, 1885, Professor, Allegheny Coll., 1894-96.—Asst. Professor of Latin, Univ. of Mich.

Arthur Stanley Mackenzie, (F), A. B., Dalhousie, 1885.—Professor of Physics, Bryn Mawr.

*Edward Payson Manning, (F), A. B., Brown, 1889, Instructor, St. Lawrence Univ., 1894-95. **February* 15, 1897.

Charles Carroll Marden, A. B., 1889, Instructor, Univ. of Mich., 1890-91, Instructor, 1894-97.—Associate in Romance Lang.

Edward Bennett Mathews, (F), A. B., Colby, 1891.—Associate in Mineralogy.

Philip Randle Moale, A. B., 1889.—Analytical Chemist, New York City.

Constance Pessels, B. L., Univ. of Texas, 1886.—Instructor in English, Univ. of Texas.

Jesse Siddall Reeves, S. B., Amherst, 1891.—Richmond, Ind.

Arthur Percy Saunders, (F), A. B., Toronto, 1890, Instructor in Chemistry, Univ. of Wis., 1894-97.—Europe.

Robert Lincoln Slagle, A. B., Lafayette, 1887.—Professor of Chemistry, S. Dakota School of Mines.

Rev. Daniel Gurden Stevens, Jr., (F), A. B., 1891, B. D., Crozer Theol. Sem., 1897.—Clergyman, Balt.

Frederick Henry Sykes, (F), A. B., Toronto, 1885, Professor, Western Univ. (Ont.), 1895-97.—University Extension Lecturer, and Editor of *The Citizen*, Phila.

Milo Scott Walker, Ph. B., Wooster, 1889.—Instructor in Chemistry and Physics, Racine (Wis.) High School.

George Francis Weida, (F). Professor, Blackburn Univ., 1894-96, and Baker Univ., 1896-97.—Professor of Pure Chemistry, Kansas Agric. Coll. (34)

1895.

Rufus Mather Bagg, A. B., Amherst, 1891, Assistant, 1895-97.—Assistant, State Museum, Albany, N. Y.

Thomas Stockham Baker, (F), A. B., 1891.—Instructor in German.

James Curtis Ballagh, A. B., 1894.—Instructor in History.

Daniel Base, A. B., 1891.—Assoc. Professor of Chemistry, Md. Coll. of Pharmacy.

Henry Marvin Belden, A. B., Trinity (Conn.), 1888.—Assoc. Professor of English, Univ. of Missouri.

Arthur Fisher Bentley, (F), A. B., 1892.—Docent in Sociology, Univ. of Chicago.

Samuel Walker Beyer, (F), S. B., Iowa Agric., 1889.—Assoc. Professor of Geology, Iowa Agric. Coll.

William Bromwell, A. B., 1888.—Instructor in Chemistry, Pratt Inst., Brooklyn.

Clarence Griffin Child, (F), A. B., Trinity (Conn.), 1886.—Asst. Editor, Worcester's Dictionary; Instructor in English, Univ. of Pa.

Fonger De Haan, (F), Assistant, Instructor, and Associate, 1894–97.—Associate in Spanish, Bryn Mawr.

Charles Sumner Estes, A. B., Colby, 1884.—Professor of Latin, Furman Univ., S. C.

Henry Fay, A. B., Lafayette, 1889.—Instructor in Chemistry, Mass. Inst. of Tech.

Henry Stewart Gane, (F), A. B., Amherst, 1891.—U. S. Geol. Survey, Washington.

George William Gray, A. B., 1890.—Chemist, Standard Oil Company, Whiting, Ind.

John Joseph Griffin, A. B., Ottawa Univ., 1881.—Professor of Chemistry, Catholic Univ.

William August Haussmann, (F), A. B., 1892.—Instructor, Allegheny (Pa.) High School.

John Haynes, A. B., Williams, 1888.—Professor of History, etc., Free Academy, Norwich, Conn.

Samuel Rivers Hendren, A. B., Washington and Lee, 1892.—Staunton, Va.

Howard Haines Higbee, A. B., Yale, 1884, Assistant, Tufts Coll., 1895–96.—Assistant in Chemistry, Hamilton Coll.

Rockwell Dennis Hunt, Ph. B., Napa Coll., 1890.—Professor of History, etc., Univ. of the Pacific.

Joseph Rufus Hunter, A. B., Wake Forest, 1885.—Professor of Chemistry, Richmond Coll.

George Wesley Johnston, (F), A. B., Toronto, 1886, Acting Asst. Professor, Cornell, 1895–96.—Lecturer in Latin, Univ. of Toronto.

Thomas Franklin Kane, (F), A. B., De Pauw, 1888.—Professor of Latin, Olivet Coll.

William Jay Karslake, S. B., Lafayette, 1891, Instructor, Dalhousie Univ., 1895–96.—Professor of Chemistry, Butler Univ.

George Charles Keidel, (F), A. B., 1889.—Instructor in Romance Lang.

William Hamilton Kirk, (F), A. B., 1893.—Instructor in Latin, Vanderbilt.

John Holladay Latane, A. B., 1892, Instructor in History, etc., San Rafael, Cal., 1896–97.—Fellow by Courtesy.

Exum Percival Lewis, S. B., Columbian, 1888.—Asst. Professor of Physics, Univ. of Cal.

William Henry Maltbie, (F), A. B., Ohio Wesleyan, 1890.—Assoc. Professor of Mathematics, Woman's Coll., Balt.

Solomon Reid McKee, A. B., Davidson, 1888.—Professor of Chemistry, Ogden Coll.

Thomas Francis Moran, (F), A. B., Univ. of Mich., 1887.—Professor of History, etc., Purdue Univ.

Louis Trenchard More, (F), Ph. B., Washington Univ., 1892, Instructor, Worcester Polytech., 1895–96.—Demonstrator of Physics, Univ. of Neb.

Anthony Moultrie Muckenfuss, A. B., Wofford, 1889.—Professor of Chemistry, Millsaps Coll., Miss.

Lyman Churchill Newell, Ph. B., Brown, 1890.—Instructor in Chemistry, Normal School, Lowell, Mass.

James Flack Norris, (F), A. B., 1892.—Instructor in Chemistry, Mass. Inst. of Tech.

Edwin Fitch Northrup, (F), A. B., Amherst, 1891, Assoc. Professor of Physics, Univ. of Texas, 1896–97.—Philadelphia.

Robert Somerville Radford, B. Ph., Univ. of Va., 1889, Ph. D., 1891, and A. M., 1892.—Instructor in Latin, Academy of Northwestern Univ.

René de Saussure, École Polytechnique, Paris.—Professor of Mathematics, Catholic Univ.

Thomas Edward Shields, A. M., St. Mary's Sem., 1892.—Instructor in Biology, St. Paul's Theol. Sem., Minn.

John Archer Silver, A. B., Princeton, 1886.—Professor of History, Hobart Coll.

Alfred William Stratton, (F), A. B., Toronto, 1887.—Assistant in Sanskrit, Univ. of Chicago.

William Stuart Symington, Jr., A. B., 1891, Assoc. Professor, Stanford, 1894–95.—Professor of Romance Lang., Amherst.

Masayoshi Takaki, S. B., Syracuse, 1891.—Tokyo, Japan.

Robert Richardson Tatnall, S. B., Haverford, 1890.—Instructor in Physics, Univ. of Pa.

Thaddeus Peter Thomas, B. P., Univ. of Tenn., 1885.—Assoc. Professor of History, Woman's College, Balt.

James Waddell Tupper, A. B., Dalhousie, 1891.—Professor of English, Western Univ., Ont.

William Achenbach Wetzel, A. B., Lafayette, 1891.—Ackermanville, Pa. (47)

1896.

Benjamin William Arnold, Jr., A. B., Randolph Macon, 1891.—Instructor in History, etc., Richmond, Va.

George Melville Bolling, (F), A. B., Loyola, 1891.—Asst. Professor of Compar. Philology, Catholic Univ.; Fellow by Courtesy.

Ferdinand Bonnotte.—Professor of Modern Lang., Western Md. Coll.

Alfred Cookman Bryan, A. B., 1892.—Instructor in Economics, Washington High School.

Arthur Douglas Chambers, (F), A. B., Toronto, 1892.—Chemist, Ashburn, Mo.

Julian Alvin Carroll Chandler, A. B., William and Mary, 1891.—Professor of English, Woman's College, Richmond, Va.

James Wilkinson Chapman, Jr., A. B., Washington (Md.), 1892, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.

Henry Scofield Cooley, S. B., New York Univ., 1891.—Instructor in History, Ridgeville Coll., Ind.

Henry Rushton Fairclough, (F), A. B., Toronto, 1888, Lecturer, Toronto, 1887-93.—Assoc. Professor of Greek and Latin, Stanford Univ.

Edson Fessenden Gallaudet, A. B., Yale, 1893.—Assistant in Physics, Yale.

William Francis Gallaway, (F), A. B., 1891.—Classical Instructor, Savannah, Ga.

Frederick Stearns Hollis, S. B., Mass. Inst. of Tech., 1890.—Newton Highlands, Mass.

Reid Hunt, (F), A. B., 1891, M. D., Phys. and Surg. (Balt.), 1896.—Tutor in Physiology, Columbia; Associate (*elect*) in Pharmacology.

Charles William Leverett Johnson, (F), A. B., 1891.—Instructor in Greek, Yale.

Oliver Martin Johnston, (F), A. B., Mississippi Coll., 1890, Lecturer, Bryn Mawr, 1896-97.—Asst. Professor of Romanic Lang., Stanford Univ.

Frederick Robertson Jones, A. B., Western Md., 1892, Instructor, Western Md., 1896-97.—Instructor in History, Union Coll.

James Pinckney Kinard, S. C. Mil. Acad., 1886.—Professor of English, Winthrop School, S. C.

Henry McElderry Knower, (F), A. B., 1890, Bruce Fellow, 1895-96, Instructor in Biology, Williams, 1896-97.—Fellow by Courtesy.

Gordon Jennings Laing, (F), A. B., Toronto, 1891, Fellow, Amer. School of Classical Studies, Rome, 1896-97.—Reader in Latin, Bryn Mawr.

George Lefevre, (F), A. B., 1891, Bruce Fellow, 1895-97.—Assistant in Zoology.

Ebenezer Mackay, (F), A. B., Dalhousie, 1886.—Professor of Chemistry and Mineralogy, Dalhousie.

Raphael Monroe McKenzie, S. B., New York Univ., 1890.—Rahway, N. J.

Henry Ludwell Moore, (F), A. B., Randolph Macon, 1892, Instructor, 1896-97.—Professor of Economics, Smith Coll.

Franklin Lafayette Riley, (F), A. B., Miss. Coll., 1889, President, Hillman Coll., 1896-97.—Professor of History, Univ. of Miss.

Brantz Mayer Roszel, (F), A. B., 1889.—Instructor in Physics, Washington High School.

Herbert Armistead Sayre, B. E., Univ. of Ala., 1893.—Professor of Mathematics, etc., Ursinus Coll., Pa.

Frederick George Gottlob Schmidt, (F), Acting Professor, Cornell Coll., 1896-97.—Professor of Modern Lang., Univ. of Oregon.

Thomas Stanley Simonds, A. B., Harvard, 1884.—Professor of Latin, Hobart Coll.

George Otis Smith, (F), A. B., Colby, 1893.—U. S. Geol. Survey, Washington.

Michael Druck Sohon, A. C., Lehigh, 1890, and M. S., 1894.—Instructor in Organic Chemistry, Lehigh.

Francis Edgar Sparks, A. B., 1893.—Archivist, Md. Historical Society.

Frederic William Speirs, S. B., Worcester Polytech., 1888.—Professor of Economics, Drexel Inst.

Arthur Coe Spencer, S. B., Case School, 1892.—U. S. Geol. Survey, Washington.

Thomas Hardy Taliaferro, (F), C. E., Va. Mil. Inst., 1890.—Instructor in Mathematics, Pa. State Coll.

John Thorne, A. B., Denison, 1885.—Balt.

Harry Langford Wilson, (F), A. B., Queen's Univ., (Ont.), 1887.—Instructor in Latin. (36)

1897.

Gellert Alleman, S. B., Pennsylvania Coll., 1893.—Instructor in Chemistry, Univ. of Maine.

Edward Cooke Armstrong, (F), A. B., Randolph-Macon, 1890.—Instructor in Romance Lang.

Byron Briggs Brackett, A. B., Syracuse, 1890.—Instructor in Electricity, Union Coll.

James Morton Callahan, (F), A. B., Indiana Univ., 1894.—Lecturer in History, Hamilton Coll.

Hubert Lyman Clark, (F), A. B., Amherst, 1892.—Instructor in Biology, Amherst.

Frank Hollinger Clutz, (F), A. B., Midland, 1892.—Instructor, Midland Coll.

*Franklin Story Conant, (F), A. B., Williams, 1893, Bruce Fellow, 1897. **September* 13, 1897.

William Scofield Day, A. B., Columbia, 1884.—Assistant in Physics, Columbia.

Noah Ernest Dorsey, (F), A. B., 1893.—Assistant in Physics.

Pelham Edgar, (F), A. B., Toronto, 1892.—Professor of Modern Lang., Victoria Univ., Ont.

Samuel Eagle Forman, A. B., Dickinson, 1887.—Teacher, Balt.

William Ritchie Fraser, A. B., Dalhousie, 1882.—Classical Instructor, Morristown, N. J.

Edwin Luther Green, (F), A. B., Washington and Lee, 1892.—Fellow by Courtesy; Professor (*elect*) of Greek, Central Univ., Ky.

Arthur Sewall Haggett, (F), A. B., Bowdoin, 1893.—Europe.

William Edwards Henderson, (F), A. B., Wooster, 1891.—Professor of Chemistry, Ohio Univ.

William Jackson Humphreys, (F), A. B., Washington and Lee, 1886.—Instructor in Physics, Univ. of Va.

Rev. Bartlett Burleigh James, A. B., Western Md., 1891.—Clergyman, Harper's Ferry, W. Va.

Duncan Starr Johnson, (F), S. B., Wesleyan, 1892.—Bruce Fellow.

Edwin Wexler Kennedy, A. B., Univ. of Tenn., 1880, Instructor, Woman's Coll., Balt., 1895-97.—Superintendent of Schools, Union City, Tenn.

Francis Plaisted King, (F), A. B., Colby, 1890, Asst. State Geologist of Georgia, 1893-96.—Portland, Me.

Omera Floyd Long, (F), A. B., Ky. Wesleyan, 1890.—Instructor in Latin, Northwestern Univ.

William Tyler Mather, (F), A. B., Amherst, 1886, Assistant, 1897.—Associate Professor of Physics, Univ. of Texas.

John McLaren McBryde, Jr., (F), A. B., Univ. of S. C., 1890.—Professor of English, Hollins Inst., Va.

John Frederick Mohler, (F), A. B., Dickinson, 1887.—Professor of Physics, Dickinson.

Charles Patrick Neill, A. B., Georgetown, 1891.—Assoc. Professor of Economics, Catholic Univ.

Robert Stewart Norris, S. B., Univ. of Cal., 1892.—Chemist, Experiment Sta., Middletown, Conn.

Philip Ogden, A. B., Cornell, 1891.—Instructor in Romance Lang.

Nathan Allen Pattillo, S. B., Southern Univ., 1887.—Professor of Mathematics, Normal Coll., Florence, Ala.

Alexander Pell, (F).—Professor of Mathematics, Univ. of S. Dakota.

Charles Dabney Ragland, (F), A. B., Randolph Macon, 1889.—Professor of Chemistry, Randolph Macon.

Milton Reizenstein, A. B., 1894.—Agent, Baron Hirsch Foundation, N. Y.

Frank Roy Rutter, (F), A. B., 1894.—Fellow by Courtesy.

John Adams Scott, (F), A. B., Northwestern, 1891.—Asst. Professor of Greek, Northwestern Univ.

George Burbank Shattuck, (F), S. B., Amherst, 1892.—Assistant in Geology.

George Shipley, A. B., Randolph-Macon, 1887.—English Master, Boys' Latin School; Asst. Editor, *The Baltimore American.*

Charles Peter Sigerfoos, S. B., Ohio State Univ., 1889, Assistant in Zoology, 1895-97.—Asst. Professor of Biology, Univ. of Minn.

Enoch Walter Sikes, A. M., Wake Forest, 1891.—Professor of Political Science and History, Wake Forest.

William Bull Stoddard, S. B., Univ. of Colo., 1894.—Instructor in Chemistry, Colo. School of Mines.

Hugo Paul Thieme, A. B., 1893.—Asst. Professor of Modern Lang., Earlham.

George Washington Ward, A. B., Western Md., 1890.—Professor of History, etc., Western Md. Coll.

Louis Napoleon Whealton, A. B., Western Md., 1892.—Attorney at Law, N. Y.

Charles Francis Woods, Jr., A. B., 1891.—Professor of Modern Lang., Woman's Coll., Richmond, Va. (42)

1898.

Charles William Peppler, (F), A. B., 1892.—Fellow by Courtesy.

Ebenezer Emmet Reid, (F), A. M., Richmond, 1892.—Fellow.

William Berney Saffold, (F), A. B., Univ. of Ala., 1887.—Professor of Latin and Greek, Univ. of Ala. (3)

(Degrees will also be conferred at the close of the academic year in June.) (459)

---

9. Doctors of Medicine.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a fellowship here.)

Charles Russell Bardeen, A. B., Harvard, 1893.—Assistant in Anatomy.

Thomas Richardson Brown, A. B., 1892.—Interne, J. H. Hospital.

Walter S. Davis, S. B., Amherst, 1893.—Interne, J. H. Hospital.

Louis Philip Hamburger, A. B., 1893.—Interne, J. H. Hospital.

Guy LeRoy Hunner, S. B., Univ. of Wis., 1893.—Interne, J. H. Hospital.

Irving Phillips Lyon, A. B., Yale, 1893.—Interne, J. H. Hospital.

William George Mac Callum, A. B., Toronto, 1894.—Interne, J. H. Hospital.

Charles Neil McBryde, S. B., Univ. of S. C., 1891, M. S., Va. Polytechnic, 1892.—Blacksburg, Va.

James Farnandis Mitchell, A. B., 1891.—Interne, J. H. Hospital.

Joseph Longworth Nichols, (F), A. B., Harvard, 1893.—Fellow.

Eugene Lindsay Opie, A. B., 1893.—Interne, J. H. Hospital.

Mary Secord Packard, A. B., Vassar, 1892.—Interne, J. H. Hospital.

Omar Borton Pancoast, S. B., Swarthmore, 1893.—Interne, J. H. Hospital.

Clement Andariese Penrose, A. B., 1893.—Interne, J. H. Hospital.

Richard Pearson Strong, Ph. B., Yale, 1893.—Interne, J. H. Hospital. (15)

---

10. Bachelors of Arts.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a Fellowship here.—* Died.)

1879.

George Washington McCreary, City Librarian, Balt., 1896-98.—Baltimore.

Chase Palmer, (F), Ph. D., 1882, Assistant, Mass. Inst. of Tech., 1882-83, Professor, Mass. Normal School, Salem, 1883-87, Assistant, Tufts Coll., 1887-88, Professor, Wabash Coll., 1888-90.—Professor of Chemistry, Manual Training High School, Louisville, Ky.

Edward Henry Spieker, (F), Ph. D., 1882, Instructor and Associate, 1882-88.—Assoc. Professor of Greek and Latin. (3)

1880.

Rev. Thomas Milton Beadenkopf, B. D., Yale, 1885.—Clergyman, Balt.

Allen Kerr Bond, M. D., Univ. of Md., 1882.—Physician, Balt.

William Cathcart Day, (F), Ph. D., 1883, Professor, St. John's Coll., 1883-84, and Univ. of Nashville, 1884-87.—Professor of Chemistry, Swarthmore Coll.

Henry Laurence Gantt, M. E., Stevens Inst. of Tech., 1884, Instructor, McDonogh School, 1886-87.—Fitchburg, Mass.

Edgar Goodman, LL. B., Univ. of Md., 1881.—Editor, *The Baltimore American.*

Rev. Carl Eckhardt Grammer, Va. Theol. Sem., 1884, S. T. D., Trinity (Conn.), 1895, Professor, Va. Theol. Sem., 1887-97. —Clergyman, Norfolk, Va.

Alexander Fridge Jamieson.—Latin Master, Lawrenceville School, N. J.

*Edmund Allen Jarvis. **October* 15, 1880.

Stewart Brian Linthicum, LL. B., Univ. of Md., 1882.—Attorney at Law, Portland, Ore.

John Hanson Lowe, LL. B., Univ. of Md., 1882.—Attorney at Law, Balt.

Rev. Leigh Clinton Morgan, late Instructor, Kenyon Coll.—Clergyman, Morristown, N. Y.

*Nelson Palmer. **June* 12, 1886.

Thomas Pettigrew.—Civil Engineer, Parkersburg, W. Va.

Harry Fielding Reid, (F), Ph. D., 1885, Assistant, 1882-84, Lecturer, 1894-96, Professor, Case School, 1886-94, Assoc. Professor, Univ. of Chicago, 1895-97.—Assoc. Professor of Geological Physics.

Rev. Wiltz Raymond Stricklen.—Clergyman, Washington, D. C.

Lewis Webb Wilhelm, (F), Ph. D., 1884. —Mathematical Master, Gymnasium School, Balt. (16)

1881.

William Wilson Baden, (F), Ph. D., 1892, LL. B, Univ. of Md., 1883, Professor of Greek, Southwestern Univ., 1892-93, and Central Univ., 1893-96.

Henry Johns Bowdoin, LL. B., Univ. of Md., 1883.—Attorney at Law, Balt.

John Wilson Brown.—Philadelphia, Pa.

David Talbot Day, (F), Ph. D., 1884.—U. S. Geol. Survey, Washington.

William Henry Howell, (F), Ph. D., 1884, M. D., Univ. of Mich., 1890, Assistant, Associate, and Assoc. Professor, 1884-89, Lecturer and Professor, Univ. of Mich., 1889-92, Assoc. Professor, Harvard, 1892-93.—Professor of Physiology.

John Hemsley Johnson, LL. B., Univ. of Md., 1887, Instructor, McDonogh School, 1881-86.—Attorney at Law, Balt.

James Edward Keeler, D. Sc., Univ. of Cal., 1893, Allegheny Observ., 1882-86, Fellow, Royal Astron. Society of London, Lick Observ., 1886-91, Professor, Western Univ. of Pa., and Director, Allegheny Observatory, 1891-98.—Director, Lick Observatory.

Rev. Edwin George Richardson.—Clergyman, Milwaukee, Wis.

Adoniram Judson Robinson, LL. B., Univ. of Md., 1885, Instructor, Balt. City Coll., 1881-87.—Attorney at Law, Balt.

*Henry Rolando, M. D., Univ. of Md., 1883. **October* 4, 1888.

Lee Sale, LL. B., Washington Univ., 1885, Instructor, Louisville High School, 1881-83.—Attorney at Law, St. Louis, Mo.; Lecturer, St. Louis Law School.

Mactier Warfield, M. D., Univ. of Md., 1884.—Physician, Balt. (12)

1882.

William Hughlett Adkins, LL. B., Univ. of Md., 1883.—Attorney at Law, Easton, Md.

Thomas Alexis Berry.—Laurel, Md.

Gustav Bissing, (F), Ph. D., 1885, Examiner, U. S. Patent Office, 1884-98.—Patent Lawyer, Washington.

Walter Bernard Clarkson, Teacher, Jacksonville, 1880-83. — Supt. of County Schools, Jacksonville, Fla.

Hermann Louis Ebeling, (F), Ph. D., 1891. —Professor of Greek, Miami Univ.

Louis Garthe.—Baltimore.

Edward Ingle.—Baltimore.

Richard Fuller Kimball, LL. B., Univ. of Md., 1884.—Attorney at Law, Balt.

*Gustav Adolph Liebig, Jr., (F), Ph. D., 1885, Assistant, 1887-90. **February* 10, 1897.

Charles William Emil Miller, (F), Ph. D., 1886, Professor, Peoria (Ill.) High School, 1888-90, and Walther Coll., St. Louis, 1890-91.—Associate Professor of Greek.

James Page, Allegheny Observatory, 1886-87.—U. S. Coast Survey, Washington.

Albert Gallatin Palmer, (F), Ph. D., 1885, Assistant and Asst. Professor, Swarthmore, 1885-87.—Norwood, Md.

Robert Miller Reese.—Baltimore.

Lewis Tebbetts Stevens, (F), M. D., Harvard, 1887, late Lecturer, Washington Univ. **February* 9, 1898.

Herbert Thorndyke Tiffany, LL. B., Univ. of Md., 1885.—Washington, D. C. (15)

1883.

William Shirley Bayley, (F), Ph. D., 1886. —U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.

Maurice Fels, LL. B., Univ. of Pa., 1886.—Attorney at Law, Philadelphia.

David Sterrett Gittings.—Baltimore.

William Beatty Harlan, LL. B., Univ. of Md., 1885, A. M., St. John's, 1888.—Attorney at Law, Belair, Md.

George Theophilus Kemp, (F), Ph. D., 1886, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886–87, Associate and Assoc. Director, etc., Hoagland Lab., 1888–93.—Professor of Physiology, Univ. of Illinois.

Gonzalez Lodge, (F), Ph. D., 1886, Professor, Davidson, 1886–88.—Professor of Latin, Bryn Mawr.

William Edgar Stratton, M. D., Harvard, 1886.—Physician, Brooklyn, N. Y.

Henry Winslow Williams, LL. B., Univ. of Md., 1885.—Attorney at Law, Balt.

Henry Van Peters Wilson (F), Ph. D., 1888, Bruce Fellow, 1888–89.—Professor of Biology, Univ. of N. C.

William John Witzenbacher, Instructor, McDonogh School, 1883–86.—Attorney at Law, Hagerstown, Md. (10)

1884.

Rev. Albert Clayton Applegarth, Ph. D., 1887.—Clergyman, Chester, Pa.

Charles Walter Artz, LL. B., Columbia, 1886.—Attorney at Law, N. Y.

Walter Bliss Canfield.—Chemist, Coatesville, Pa.

George Gibson Carey, LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

William Kennedy Cromwell.—Baltimore.

Charles William Remsberg Crum, M. D., Univ. of Md., 1888, Instructor, Mercersburg Coll., 1884–86, 1889–90, Professor of Mathematics, Ursinus Coll., 1892–95.—Physician, Frederick, Md.

Harry Friedenwald, M.D., Phys. and Surg., Balt., 1886.—Physician, Balt.; Assoc. Professor, Coll. of Phys. and Surg.

Rev. William Lindsay Glenn, LL. B., Univ. of Md., 1888.—Clergyman, Balt.

John Hinkley, LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

Charles Morris Howard, LL. B., Univ. of Md., 1888.—Attorney at Law, Balt.

John Deering Lord, Jr., LL. B., Columbia, 1886.—Attorney at Law, Balt.

Jere Williams Lord, M. D., Univ. of Pa., 1887.—Associate in Dermatology and Instructor in Anatomy.

William Patrick Lyons, LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

Edgar George Miller, Jr., LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

William Ridgely Orndorff, (F), Ph. D., 1887.—Assistant Professor of Organic Chemistry, Cornell.

George Dobbin Penniman, LL. B., Univ. of Md., 1886.—Attorney at Law, Balt.

William Henry Perkins, Jr., LL.B., Univ. of Md., 1888.—Attorney at Law, Balt.

*George Clement Stokes, Jr., LL. B., Univ. of Md., 1888. **January* 21, 1897.

*William John Thomas, Professor of Mathematics, Western Md. Coll., 1884–85. **March* 9, 1885.

*William Ferdinand Walz. **March* 21, 1887.

Frederick Henry Wilkens, Ph. D., Leipsic, 1891, Asst. Professor of German, Univ. of Wis., 1893–96.—Fellow by Courtesy.

George Wishart Edmond, (*extra ordinem*), Assistant, 1889–90.—Garvanza, Cal.

Charles Howard Shinn, (*extra ordinem*).—Inspector of Agric. Experiment Stations, Univ. of Cal. (23)

1885.

John Pendleton Campbell, (F), Ph. D., 1888.—Professor of Biology, Univ. of Ga.

John Glenn, Jr., LL. B., Univ. of Md., 1887.—Attorney at Law, Balt.

Rev. Junius Moore Horner, B. D., General Theol. Sem., N. Y., 1890.—Classical Instructor, Oxford, N. C.

James Albert Loane.—Baltimore.

Harry Wilbur Price, LL. B., Columbian, 1887.—Attorney at Law, Chicago.

Benjamin Titus Roberts, Jr.—Morgan Park, Ill.

Moses Roth Ryttenberg, LL. B., Univ. of Md., 1888.—Attorney at Law, N. Y.

Hugo Steiner, LL. B., Univ. of Md., 1887.—Attorney at Law, Balt.

Henry Hazlehurst Wiegand.—Electrical Engineer, Balt. (9)

1886.

Joseph Sweetman Ames, (F), Ph. D., 1890, Assistant and Associate, 1889–93.—Assoc. Professor of Physics.

Wilson Lloyd Bevan, B. D., General Theol. Sem., N. Y., 1889., A. M. and Fellow of Columbia, 1889, Ph. D., Munich, 1893.—Classical Master, N. Y.

Thomas Hepburn Buckler, M. D., Univ. of Md., 1888.—Physician, Balt.

Alfred Robert Louis Dohme, Ph. D., 1889.—Chemist, Balt.

Albert Alvin Doub, Teacher, Frostburg, Md., 1886–93.—Attorney at Law, Cumberland, Md.

William Snyder Eichelberger, (F), Ph. D., 1891, Instructor in Mathematics, etc., Wesleyan Univ., 1891–96.—U. S. Nautical Almanac, Washington.

Harry English.—Instructor, High School, Washington, D. C.

Abraham Flexner.—Classical Instructor, Louisville, Ky.

William Edward Gates.—Cleveland, O.

*William Curns Lawrence Gorton, (F), Ph. D., 1889, Assoc. Professor and Professor of Mathematics, Woman's Coll., Balt., 1888–94. * *November* 8, 1894.

Joseph Edward Harry, (F), Ph. D., 1889.—Professor of Greek and German, Georgetown Coll., Ky.

Benjamin Henry Hartogensis.—Editor, *The Jewish Exponent;* Attorney at Law, Balt.

James Shaler Hodges, Instructor, St. Paul's School, N. H., 1886–88.—Electrical Engineer, Balt.

Theodore Hough, (F), Ph. D., 1893, Instructor, McDonogh School, 1886–89.—Asst. Professor of Biology, Mass. Inst. of Tech.

Percy Meredith Hughes.—Principal, Central High School, Washington, D. C.

John Henry Laessig, Jr.—Chemist, Balt.

Allan McLane, Jr., LL. B., Univ. of Md., 1888.—Attorney at Law, Balt.

John Hanson Thomas McPherson, (F), Ph. D., 1890, Instructor, Univ. of Mich., 1890–91.—Professor of History, Univ. of Ga.

Colyer Meriwether, Ph. D., 1893, Instructor in Sendai, Japan, 1889–92.—Instructor, High School, Washington, D. C.

John Pleasants.—Baltimore.

Richard Hall Pleasants, Jr., LL. B., Univ. of Md., 1889.—Attorney at Law, Balt.

William Flood Smith, M. D., Phys. and Surg., Balt., 1889, Instructor, McDonogh School, 1886–87.—Physician, Balt.

Michael Daniel Stein.—Street Railway Supt., San Francisco.

Bernard Wiesenfeld, LL. B., Univ. of Md., 1889.—Attorney at Law, Balt.

John Whitridge Williams, M. D., Univ. of Md., 1888.—Assoc. Professor of Obstetrics.

Langdon Williams.—Teacher, Philadelphia.

William Klapp Williams, Ph. D., 1889.— *June* 4, 1897.

John Randolph Winslow, M. D., Univ. of Md., 1888.—Physician, Balt.

*Allan Chase Woods. **September* 9, 1886.

Frederick George Young, Vice-President, S. Dakota Normal School, 1888–91.—Professor of Economics, etc., Univ. of Oregon.

*Thomas McCabe, (*extra ordinem*), (F), Ph. D., 1888, Instructor, Univ. of Mich., 1888–89, Professor, Indiana Univ., 1889–90, Associate in French, Bryn Mawr, 1890–91. * *February* 22, 1891. (31)

1887.

Edward Carey Applegarth, (F), Ph. D., 1890, M. D., Phys. and Surg., Balt., 1892.—Physician, Balt.

Richard Howard Bayard, LL. B., Univ. of Md., 1889.—Attorney at Law, Balt.

Herbert Maxwell Brune, LL. B., Univ. of Md., 1889.—Attorney at Law, Balt.

Charles Edward Coates, Jr., Ph. D., 1891, Professor, St. John's Coll., 1891–93.—Professor of Chemistry, La. State Univ.

Rev. William Roswell Cole, B. D., Harvard, 1890.

Paul Joseph Dashiell, Ph. D., 1891, Instructor, Lehigh, 1889–90, 1891–92.—Professor of Chemistry, U. S. Naval Acad.

George Peter Dreyer, (F), Ph. D., 1890, Demonstrator, 1890–92.—Associate in Biology.

Edward Duffy, Jr., LL. B., Univ. of Md., 1889.—Attorney at Law, Balt.

James Clark Fifield.—Attorney at Law, Minneapolis, Minn.

Julius Friedenwald, M. D., Phys. and Surg. (Balt), 1890.—Physician, Balt.; Assoc. Professor of Pathology, Coll. of Phys. and Surg.

Douglas Huntly Gordon, LL. B., Univ. of Md., 1889.—Editor, *The Baltimore News.*

Jay Cæsar Guggenheimer, LL. B., Columbia, 1891.—Attorney at Law, N. Y.

Charles Homer Haskins, Ph. D., 1890, Instructor, 1889–90.—Professor of Institutional History, Univ. of Wis.

George Lincoln Hendrickson, Professor, Colorado Coll., 1889–91, and Univ. of Wis., 1891–96.—Professor of Latin, Univ. of Chicago.

Franz Otto Karl Hoffmann.—Berlin, Germany.

Robert Milligan McLane, Jr., LL. B., Univ. of Md., 1891.—Attorney at Law, Balt.

Robert William Rogers, Ph. D., Haverford, 1890, D. D., Wesleyan, 1894, Ph. D., Leipsic, 1895, Instructor, Haverford, 1887–90, Professor, Dickinson, 1890–93.—Professor of Hebrew, Drew Theol. Sem.; Lecturer, Woman's Coll., Balt.

Henry Oliver Thompson, LL. B., Univ. of Md., 1890.—Attorney at Law, Balt.

Benjamin Simon William Tuska, A. M., Columbia, 1888, and LL. B., 1889.—Attorney at Law, N. Y.

Rev. Robert William Henry Weech.—Clergyman, Aberdeen, Md.

*Edward William Willis, M. D., Univ. of Md., 1889. **August* 7, 1893.

Henry Firey Wingert.—Attorney at Law, Hagerstown, Md.

Walter Bell Scaife (*extra ordinem*), Ph. D., Vienna, 1887.—Pittsburg, Pa.

Albert Henry Smyth (*extra ordinem*).—Professor of English, Central High School, Philadelphia. (24)

1888.

Henry Harold Ballard, Ph. D., 1893, Instructor in Chemistry, Rose Polytech. Inst., 1893–96.—Science Master, Country School for Boys, Balt.

Edward Ambrose Bechtel, (F), Professor, Mt. Morris Coll., Ill., 1889–91, and Yankton Coll., 1891–92, Teacher, Dayton, O., 1892–93, Instructor in Latin, Northwestern Univ., 1893–97.—Europe.

James William Black, Ph. D., 1891, Acting Professor, Georgetown Coll., Ky., 1891–92, Assoc. Professor, Oberlin, 1892–94.—Professor of History, etc., Colby Univ.

Charles Pliny Brigham, Ph. D., 1891.—Greenport, Long Island.

William Bromwell, Ph. D., 1895.—Instructor in Chemistry, Pratt Inst., Brooklyn.

*Hamilton McFarland Brown. **May* 8, 1892.

Arthur Lee Browne.—Assoc. Professor of Chemistry, Balt. Medical Coll.

Charles Hamilton Carey.—Baltimore.

John Broughton Daish, Instructor, Washington High School, 1888–89.—Washington.

Rev. William Levering Devries, (F), Ph. D., 1892, B. D., General Theol. Sem., N. Y., 1894.—Clergyman, Washington, D. C.

Gustav Edward Gieske, M. D., Phys. and Surg., Balt., 1891.—Catonsville, Md.

Raleigh Colston Gildersleeve.—Architect, N. Y.

Harris Hancock, Ph. D., Berlin, 1894.—Instructor in Mathematics, Univ. of Chicago.

Walter Jones, Ph. D., 1891, Acting Professor, Wittenberg Coll., 1891–92, Instructor and Professor, Purdue Univ., 1892–95.—Assistant in Physiological Chemistry.

*William Augustine Jones, LL. B., Univ. of Ala., 1889. **February* 11, 1894.

Arthur Lincoln Lamb, Instructor, Tome Inst., 1896–97.—Science Teacher, Balt.

Charles Day Lanier.—Assistant Editor, *The Review of Reviews.*

John Bright Macauley.—Washington, D. C.

*William Howard Miller, Instructor in Mathematics, Stanford Univ., 1891–93. **March* 2, 1893.

*George Neville Moore. **October* 29, 1889.

John Henry O'Donovan, M. D., Univ. of Md., 1891.—Baltimore.

Frank Eugene Reader.—Attorney at Law, New Brighton, Pa.

Louis Rettger.—Instructor, Terre Haute Normal School.

David Ellsworth Roberts.—Assistant, Art Dept., Library of Congress.

Lessing Rosenthal, LL. B., Northwestern Univ., 1891.—Attorney at Law, Chicago.

Charles Edmund Simon, M. D., Univ. of Md., 1890.—Physician, Balt.

Rev. Charles Kephart Swartz, Oberlin Theol. Sem., 1892.—Gettysburg, Pa.

Robert Melvin Tarleton, E. M., Lehigh, 1895.—Mining Engineer, Omaha, Neb.

Edward Lucas White, Assistant, Dartmouth, 1891–92.—Classical Instructor, Balt.

John White, Jr., (F), Ph. D., 1891, Assistant, Cornell, 1891–93.—Instructor in Chemistry, Univ. of Neb.

Westel Woodbury Willoughby, (F), Ph. D., 1891, Acting Asst. Professor, Stanford Univ., 1894–95.—Attorney at Law, Washington; Associate in Political Science.

William Franklin Willoughby.—Statistical Expert, U. S. Dept. of Labor, Washington.

Charles Hiram Chapman, (*extra ordinem*), (F), Ph. D., 1890, Instructor and Associate, 1889–92.—President, Univ. of Oregon.

Charles Collier Holden, (*extra ordinem*), Teacher, N. C. and Md., 1888–95.—Graduate Student. (34)

1889.

Adolph Bernhard, Ph. D., Chicago, 1894.—Assistant in Chemistry, Univ. of Chicago.

Hiram Horsburgh Bice, Professor, Austin Coll., 1890–92, and Blackburn Univ., 1892–93, Instructor, St. Joseph (Mo.) High School, 1893–96.—Classical Instructor, N. Y.

John Sedgewick Billings, M. D., Univ. of Pa., 1892.—Physician, N. Y.

Walton Bolgiano, M. D., Univ. of Pa., 1892.—Physician, Balt.

Theodore Cooke, Jr., M. D., Univ. of Md., 1891.—Physician, Balt.

Frank Barnum Culver.—Baltimore.

Richard Edward Edes, M. D., Harvard, 1895, Morgan Fellow, Harvard, 1890-91, Instructor, Mass. Inst. of Tech., 1892-93. —Physician, Dorchester, Mass.

Daniel Nathan Eisendrath, M. D., Chicago Med. Coll., 1891.—Physician, Chicago.

Albert Bernhardt Faust, (F), Ph. D., 1892, Instructor, 1894-96.—Assoc. Professor of German, Wesleyan Univ.

Charles Lee Fulton, LL. B., Univ. of Md., 1892.—Attorney at Law, Balt.

Joseph Elliott Gilpin, Ph. D., 1892.—Instructor in Chemistry.

Ross Granville Harrison, (F), Ph. D., 1894, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894-95, Instructor, 1896-97.—Associate in Anatomy.

George Newton Cressy Henschen, Instructor, Reading High School, 1889-94.—Reading, Pa.

William Sadler Hilles.—Baltimore.

William Isaac Hull, Ph. D., 1892.—Professor of History, etc., Swarthmore Coll.

Harry Clary Jones, (F), Ph. D., 1892.—Instructor in Physical Chemistry.

George Charles Keidel, (F), Ph. D., 1895.—Instructor in Romance Lang.

Jesse William Lazear, M. D., Phys. and Surg. (N. Y.), 1892.—Assistant in Clinical Microscopy.

Alfred Mann, M. D., Phys. and Surg. (N. Y.), 1892.

Charles Carroll Marden, Ph. D., 1894, Instructor, Univ. of Mich., 1890-91, Instructor, 1894-97.—Associate in Romance Lang.

William Watson McCulloh, LL. B., Univ. of Md., 1892.

Philip Randle Moale, Ph. D., 1894.—Analytical Chemist, N. Y.

Waldo Newcomer.—Baltimore.

Leonard Magruder Passano.—Instructor in Mathematics, Mass. Inst. of Tech.

Arthur Jackson Patek, M. D., Univ. of Pa., 1892.—Physician, Milwaukee, Wis.

William Peters Reeves, Ph. D., 1893, Assistant, Union Coll., 1895-97.—Instructor in English, Iowa State Univ.

Legh Wilber Reid, M. S., Princeton, 1896.—Instructor in Mathematics, Princeton, 1893-97.—Europe.

Ralph Robinson, LL. B., Univ. of Md., 1891.—Attorney at Law, Balt.

Brantz Mayer Rossel, (F), Ph. D., 1896.—Instructor in Physics, Washington High School.

Rev. John George Sadtler, B. D., General Theol. Sem., N. Y., 1893.—Clergyman, Balt.

Benjamin Bittinger Shreeves, LL. B., Univ. of Md., 1891.—Attorney at Law, Balt.

Robert Tunstall Taylor, M. D., Univ. of Va., 1891.—Physician, Balt.

Walter Herron Taylor, LL. B., Univ. of Va., 1891.—Attorney at Law, Norfolk, Va.

Winfield Scott Thomas, Professor, Chaffee Coll., 1889-90. — Classical Instructor, High School, Petaluma, Cal.

Harry Maas Ullmann, Ph. D., 1892, Honorary Fellow, Univ. of Chicago, 1892-93. —Instructor in Chemistry, Lehigh Univ.

Horatio Alanson Warren.—Teacher, Broad Brook, Conn. (36)

1890.

John McEwen Ames.—Detroit, Mich.

William Hand Browne, Jr.—Instructor in Electricity, Univ. of Neb.

James Edmund Bryan, Jr., Instructor, Mich. School of Mines, 1891-92, Principal, Houghton (Mich.) High School, 1892-93. —Supt. of Schools, Litchfield, Ill.

Rev. Ralph Erskine Carson, Allegheny Theol. Sem., 1895, Classical Instructor, Phila., 1890-92.—Missionary in Egypt.

William Henry Carson, LL. B. and A. M., Harvard, 1894.—Attorney at Law, Camden, N. J.

Sydney Million Cone, M. D., Univ. of Pa., 1893.—Assistant in Surgical Pathology.

Vernon Cook, LL. B., Univ. of Md., 1892.—Attorney at Law, Balt.

Lucius Bradley Dorr, M. D., Univ. of Md., 1890.—Physician, Buffalo, N. Y.

Edwin Stanton Faust, Ph. D., Munich, 1893, Assistant, 1894-95.—Assistant (*elect*) in Physiological Chemistry.

Ned Arden Flood.—Meadville, Pa.

Herbert Friedenwald. — Superintendent, Department of MSS., Library of Congress.

Fielding Hudson Garrison, M. D., Georgetown, 1893.—Physician, Washington.

Joseph Philip Gerry, Instructor, Washington High School, 1892-97.—Fellow and Instructor, Catholic Univ.

George William Gray, Ph. D., 1895.—Chemist, Standard Oil Co., Whiting, Ind.

Samuel Harris Guggenheimer.—Attorney at Law, N. Y.

Daniel Dorsey Guy.—Asst. Editor, *The Sun*, Balt.

James Chew Johnston, M. D., New York Univ., 1892.—Physician, N. Y.

Edward Parkin Keech, Jr., LL. B., Univ. of Md., 1892.—Attorney at Law, Balt.

Henry McElderry Knower, (F), Ph. D., 1896, Bruce Fellow, 1895-96, Instructor in Biology, Williams, 1896-97.—Fellow by Courtesy.

Berwick Bruce Lanier, M. D., Univ. of Md., 1892.—Physician, Balt.

Sylvan Hayes Lauchheimer, LL. B., Univ. of Md., 1892.—Attorney at Law, Balt.

Tilghman Brice Marden, M. D., Univ. of Md., 1892.—Physician, Balt.; Lecturer in Histology, Balt. Med. Coll.

George Clarence Morrison, LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

Arthur Alexander Oehm.—Instructor in Music, Balt.

*Arthur Rosewald Oppenheimer, M. D., Univ. of Pa., 1893. **April* 29, 1895.

Rev. Lyman Pierson Powell.—Clergyman, Ambler, Pa.

Rev. Samuel Guy Snowden, B. D., Drew Theol. Sem., 1893.—Clergyman, Moscow, Pa.

James Ernest Stokes, M. D., Univ. of Md., 1892.—Physician, Balt.

Isaac Lobe Straus, LL. B., Univ. of Md., 1892.—Attorney at Law, Balt.

Charles Snowden Watts, LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

William Wallace Whitelock, Ph. D., Munich, 1892.—New York.

William Whitridge.—Baltimore.

Adolph Grant Wolf.—Attorney at Law, Washington.

Frank Alfred Wolff, Jr., (F), Ph. D., 1893.—Chemist, Agricultural Dept., Washington.

James Homer Wright, M. D., Univ. of Md., 1892, A. M., Harvard, 1894, Fellow, Univ. of Pa., 1892-93.—Instructor in Pathology, Harvard; Pathologist in Chief, Mass. General Hospital, Boston.

Rev. Oscar Woodward Zeigler, Princeton Theol. Sem., 1893, A. M., Princeton, 1894.—Clergyman, Moscow Mills, Md.

Inazo Nitobe (Ota), (*extra ordinem*), Ph. D., Halle, 1890.—Professor of Political Economy, etc., Imperial Coll. of Agric., Sapporo, Japan. (37)

1891.

Michael Alexander Agelasto, A. M., Columbia, 1893.—Norfolk, Va.

Delano Ames, M. D., Univ. of Md., 1892.—Physician, Balt.; Lecturer in Pathology, Balt. Med. Coll.

Thomas Stockham Baker, (F), Ph. D., 1895.—Instructor in German.

Randolph Barton, Jr., LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.

Daniel Base, Ph. D., 1895.—Assoc. Professor of Chemistry, Md. Coll. of Pharmacy.

William Bissing, M. E., Ohio State Univ., 1893.—Asst. Examiner, U. S. Patent Office.

Rev. Frederick Foye Briggs, Crozer Theol. Sem., 1894.—Clergyman, Philadelphia.

Shellman Baer Brown.—Railroad Supt., Balt.

Thomas Morris Brown,—Cleveland, O.

Sidney Hand Browne.—Electrical Engineer, Balt.

Henry Andrews Bumstead.—Instructor in Physics, Yale.

Frank Kenneth Cameron, Ph. D., 1894, Fellow, Cornell, 1894-95, Asst. Professor, Catholic Univ., 1895-97.—Asst. in Physical Chemistry, Cornell.

Malcolm John Cameron, A. M., St. Francis Xavier (N. Y.), 1892, LL. B. and A. M., Columbia, 1894.—Attorney at Law, Balt.

George Carey.—Teacher, New York City.

Rev. Neilson Poe Carey, General Theol. Sem., N. Y., 1897.—Clergyman, N. Y.

Abraham Cohen, (F), Ph. D., 1894.—Instructor in Mathematics.

Harry Webster Cooke.—Attorney at Law, Denver, Colo.

Arthur Aaron Dembitz.—New York.

Augustus Kountze Detwiler, M. D., Univ. of Pa., 1894.—Physician, Omaha, Neb.

George W. Dobbin, M. D., Univ. of Md., 1894.—Assistant in Obstetrics.

William Francis Gallaway, (F), Ph. D., 1896.—Classical Instructor, Savannah, Ga.

George Henry Heitmuller, M. D., Univ. of Pa., 1894.—Physician, Washington.

Jacob H. Hollander, (F), Ph. D., 1894, Sec., Special Monetary Commission of the U. S., 1897.—Associate in Economics.

Charles McHenry Howard, LL. B., Univ. of Md., 1893.—Attorney at Law. Balt.

Reid Hunt, (F), Ph. D., 1896, M. D., Coll. of Phys. and Surg. (Balt.), 1896.—Tutor in Physiology, Columbia; Associate (*elect*) in Pharmacology.

Charles William Leverett Johnson, (F), Ph. D., 1896.—Instructor in Greek, Yale.

Henry Webster Keating.—Classical Instructor, Duxbury, Mass.

*William Knower, LL. B., Univ. of Md., 1893. **December* 27, 1894.

George Lefevre, (F), Ph. D., 1896, Bruce Fellow, 1895-97.—Assistant in Zoology.

George Milton Linthicum, M. D., Phys. and Surg. (Balt.), 1893.—Demonstrator, Woman's Med. Coll.; Physician, Balt.
Hugh Sisson Magruder.—Student of Architecture, Columbia.
Arthur William McDougall.—General Secretary, Associated Charities, Orange, N. J.
Rev. Whitford L. McDowell.—Clergyman, Balt.
James Farnandis Mitchell, M. D., 1897.—Interne, J. H. Hospital.
Archibald Campbell Murray.—Baltimore.
Charles Fairbank Painter, M. D., Harvard, 1895.—Physician, Boston; Asst. in Surgical Pathology, Harvard.
Alfred Wilmot Pleasants.—Baltimore.
Alfred Magill Randolph, Jr.—Electrician, Norfolk, Va.
William Ferdinand Rittler.—Baltimore.
Charles James Search, M. D., Univ. of Wooster, 1892.—Physician, Brooklyn, N. Y.
Alfred Jenkins Shriver, LL. B., Univ. of Md., 1893, A. M., Loyola, 1894.—Attorney at Law, Balt.
Rev. James Lawrenson Smiley.—Clergyman, Chaptico, Md.
Samuel King Smith, LL. B., Univ. of Md., 1893.—Attorney at Law, Balt.
Rev. Daniel Gurden Stevens, Jr., (F), Ph. D., 1894, B. D., Crozer Theol. Sem., 1897.—Clergyman, Balt.
Charles Morton Stewart, Jr.—Baltimore.
William Stuart Symington, Jr., Ph. D., 1895, Asst. Professor, Stanford, 1894-95.—Professor of Romance Lang., Amherst.
Matthew Möller Johnston Vea.—Stoughton, Wis.
Charles Joseph West.—Kingfisher, Oklahoma.
Charles Francis Woods, Jr., Ph. D., 1897.—Professor of Mod. Lang., Woman's Coll., Richmond.
Rev. Edward L. Watson.—Clergyman, Washington. (50)

1892.

Harry Adler, M. D., Univ. of Md., 1895.—Physician, Balt.
Newton Diehl Baker, Jr, LL. B., Washington and Lee, 1894.—Attorney at Law, Martinsburg, W. Va.
Charles Gambrill Baldwin, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Edwin Bernhard Behrend, M. D., Georgetown, 1894.—Physician, Washington.
Rev. Lunsford Emory Bennett, B. D., Drew Theol. Sem. 1894.—Clergyman, Balt.
Arthur Fisher Bentley, (F), Ph. D., 1895.—Docent in Sociology, Univ. of Chicago.
George Edward Boynton.—Principal, Utica Academy, N. Y.
Thomas Richardson Brown, M. D., 1897.—Interne, J. H. Hospital.
Alfred Cookman Bryan, Ph. D., 1896.—Instructor, Washington High School.
Charles Weathers Bump.—Asst. Editor, *The Sun*, Balt.
William Calvin Chesnut, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
John Edwin Davis, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
Henry Haywood Glassie.—Attorney at Law, Washington.
Leon Emanuel Greenbaum, LL. B., Univ. of Md., 1895.—City Attorney, Balt.
James Wesley Harvey, Jr., LL. B., Univ. of Md., 1893.—Baltimore.
William August Haussmann, (F), Ph. D., 1895.—Instructor, High School, Allegheny, Pa.
Jose Lewis Hirsh, M. D., Univ. of Md., 1895.—Physician, Balt.; Demonstrator, Univ. of Md.
Morris James.—Classical Instructor, High School, Berkeley, Cal.
Hugh Judge Jewett, Jr., LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
Theodore Woolsey Johnson, M. E., Stevens Inst., 1896.—Assistant Inspector of Steel, U. S. Navy.
John Holladay Latané, Ph. D., 1895, Instructor, San Rafael, Cal., 1896-97.—Fellow by Courtesy.
Edward Jaquelin L'Engle.—Attorney at Law, Jacksonville, Fla.
Earl Perkins Lothrop, M. D., Niagara Univ., 1894.—Physician, Buffalo, N. Y.
Charles Whitney Mixter, A. M., Harvard, 1893.—Assistant in Economics, Harvard.
Walter Alexander Montgomery.—Graduate Student.
James Flack Norris, (F), Ph. D., 1892.—Instructor in Chemistry, Mass. Inst. of Tech.
Thomas Dobbin Penniman.—Graduate Student.
Charles William Peppler, (F), Ph. D., 1898.—Fellow by Courtesy.
Albert Moore Reese.—Graduate Student.
William Miller Roberts, M. D., Univ. of Md., 1897.—Asst., J. H. Dispensary.
Abram Barr Snively, M. D., Univ. of Pa., 1895.—Physician, Waynesboro, Pa.

John Sargent Stearns, M. D., Georgetown, 1894.—Physician, Washington.
Charles Daniel Steenken, M. D., Phys. and Surg. (N. Y.), 1896.—Physician, Balt.
Leopold Stern.—Electrical Engineer, Balt.
Lester Latham Stevens, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
Gustav Lürman Stewart.—Baltimore.
John Stewart, Jr.—Baltimore.
Redmond Conyngham Stewart, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
Arthur, Bertram Turner.—Professor of Mathematics, Temple Coll., Phila.
Harold John Turner.—Graduate Student.
Richard Henry Wilson, Jr.—Graduate Student. (41)

1893.

John Robert Abercrombie, M. D., Univ. of Md., 1895.—Physician, Balt.
Adolph Hall Ahrens.—Baltimore.
Theodore George Ahrens.—Baltimore.
Delaware Clayton Andre, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
Frank Andrews.—Teacher, Rockville, Md.
William Steenbergen Blackford.—Baltimore.
George Stewart Brown, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
William Lawrence Clark.—Baltimore.
Frank Angier Clarke, Professor, Keachie Coll., 1893-94.—Student, Southern Baptist Theol. Sem., Louisville.
Edward Lowell Cox.—Chillicothe, O.
Noah Ernest Dorsey, (F), Ph. D., 1897.—Assistant in Physics.
Howard Blake Dowell, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
John Hooper Edmondson, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Henry Simpson Greenleaf, M. D., Univ. of Pa., 1895.—Physician, Berkeley, Cal.
Wilmot Griffiss.—Baltimore.
Louis Philip Hamburger, M. D., 1897.—Interne, J. H. Hospital.
John Hampden Hazelton.—Attorney at Law, Washington,
Lloyd Lowndes Jackson, Jr., LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Millard Langfeld.—Student of Medicine.
John Leypold Griffith Lee, LL. B., Univ. of Md., 1894.—Attorney at Law, Balt.
Jacob Moses Moses, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Clayland Mullikin, LL. B., Univ. of Md., 1898.—Attorney at Law, Easton, Md.
Charles Watson Newhall.—Mathematical Master, Faribault, Minn.
Frederick Bogue Noyes.—Evanston, Ill.
Eugene Lindsay Opie, M. D., 1897.—Interne, J. H. Hospital.
Charles Bingham Penrose, Jr.—Baltimore.
Clement Andariese Penrose, M. D., 1897.—Interne, J. H. Hospital.
Charles Carroll Schenck.—Graduate Student.
Siegmund Bacharach Sonneborn.—Baltimore.
Morris Ames Soper, LL. B., Univ. of Md., 1895.—Attorney at Law, Balt.
Francis Edgar Sparks, Ph. D., 1896.—Archivist, Md. Hist. Society.
Alfred Earnest Speirs, Instructor, Lehigh Univ. Prep. School, 1893-94.—Chicago, Ill.
Hugo Paul Thieme, Ph. D., 1897.—Asst. Professor of Modern Lang., Earlham Coll.
Douglas Hamilton Thomas, Jr.—Architect, Boston, Mass.
Edwin Litchfield Turnbull.—Baltimore.
Rev. John Ogle Warfield, B. D., Episcopal Theol. Sem., Camb., 1896.—Clergyman, Du Bois, Pa.
Henry Skinner West, Professor, Balt. City Coll., 1894-97.—Graduate Student.
Frederick Wallace Wilson.—The Dalles, Oregon.
Leo Wolfenstein.—Cleveland, O.
William Hamilton Kirk, (*extra ordinem*), (F), Ph. D., 1895.—Instructor in Latin, Vanderbilt. (40)

1894.

John Griffith Ames, Jr., Professor of English, Kenyon Coll., 1895-97.—Student in Oxford, England.
William Stevenson Baer.—Student of Medicine.
Rev. Adolph Elhart Baker, Union Theol. Sem., Va., 1897.
Walter Baumgarten, M. D., Washington Univ., 1896.—Assistant in Physiology, Harvard.
Arthur Henry Baxter.—Graduate Student.
Ernest Julius Becker.—University Scholar.
Thomas Pumphrey Benson, M. D., Univ. of Md., 1898.
Thomas Fitz Patrick Cameron, Teacher, Funkstown, Md., 1896-97.—Baltimore.
Moses S. Cohen, LL. B., Univ. of Md., 1896.—Attorney at Law, Balt.
Bernard Milton Cone, A. M., Columbia, 1896, LL. B., 1897.—Attorney at Law, N. Y.

Charles Angelo Conrad, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Walter Cox.—Student of Medicine.
Percy Millard Dawson.—Student of Medicine.
Eli Frank, LL. B., Univ. of Md., 1896.—Attorney at Law, Balt.
Nathaniel Edward Griffin.—Graduate Student.
Benjamin Howell Griswold, Jr., LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Richard Jordan Hancock, Jr.—Student of Law, Washington and Lee Univ.
Stephen Cloud Harry.—Mathematical Instructor, Balt.
Thomas Wood Hastings.—Student of Medicine.
Conrad Augustine Hauser.—Student of Theology, Lancaster, Pa.
Herman Frederick Krafft.—Classical Instructor, N. Y.
Harry Taylor Marshall.—Student of Medicine.
George Stevens Maynard.—General Electric Co., Schenectady, N. Y.
Louis Wardlaw Miles, M. D., Univ. of Md., 1897.—Graduate Student.
William Albert Nitze.—Fellow.
James Piper, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
John Eugene Howard Post.—Baltimore.
John Hurst Purnell.—Baltimore.
Milton Reizenstein, Ph. D., 1897.—Agent, Baron Hirsch Foundation, N. Y.
Frank Roy Rutter, Ph. D., 1897.—Fellow by Courtesy.
Simon H. Stein, LL. B., Univ. of Md., 1896.—Attorney at Law, Balt.
Emerson H. Strickler.—Chemist, Balt.
Joseph Pembroke Thom, Jr.—Baltimore.
Rev. George Harvey Trull, Princeton Theol. Sem., 1897.
Clinton Gambrill Tudor.—Civil Engineer, Balt.
Malcolm Van Vechten Tyson, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Horace Scudder Uhler, Instructor, Northwestern Univ., 1896–97.—Science Master, University School, Balt.
George Talbot Whitfield.—Attorney at Law, Balt.
Pere Lethrbury Wickes, Jr.—Attorney at Law, Baltimore.
*Chester Clark Wood. **September* 11, 1895.
James Curtis Ballagh, (*extra ordinem*), Ph. D., 1895.—Instructor in History.

(41)

1895.

Wilbur Withrow Ballagh.—Tenafly, N. J.
William Sherman Bansemer, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Harry Bissing.—Electrician, New York.
Hanson Briscoe Black.—Attorney at Law, Charleston, W. Va.
Charles Henry Hardin Branch.—Student, Princeton Theol. Sem.
George Dobbin Brown.—Graduate Student.
Lawrason Brown.—Student of Medicine.
Humphrey Warren Buckler.—Student of Medicine.
William Mack Chowning, S. B., Knox, 1894.—Student of Medicine.
Charles Bevan Clark, M. E., Mass. Inst. of Tech., 1897.
Gilbert Abraham Coblens.—Baltimore.
Reuben Carll Foster, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Frank Taylor Fulton, S. B., Knox, 1894.—Student of Medicine.
James Daton Gallagher.—Student of Medicine.
George Herbert Gray.—Student of Architecture, N. Y.
Milton Daniel Greenbaum, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Roland Bridendall Harvey, LL. B., Univ. of Md., 1896.—New York City.
George Oscar James, Instructor, Univ. of Utah, 1896–97.—Graduate Student.
Stuart Symington Janney.
Marcus Kaufman, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Charles Alexander Kilvert.—Boston, Mass.
Ernest Pendleton Magruder, Supt. of Schools, Williamsport, Md., 1896–97.—Upper Marlboro.
Edward Spiller Oliver.—Student of Medicine.
John Donaldson Parker, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
David Sterrett Pindell.—Electrician, Balt.
Jacob Hall Pleasants, Jr.—Student of Medicine.
Gustav Rudolph Poetter.—Student of Theology, Lancaster, Pa.
John Andrew Robinson, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Sylvan Rosenheim.—Student of Medicine.
Charles Albert Savage.—Graduate Student.
Edgar Randolph Strobel.—Student of Medicine.
Robert McIlvaine Torrence.—Washington, Pa.

Campbell Easter Waters.—Graduate Student.
Rev. Arthur Charles Watkins.—Clergyman, Hannibal, N. Y.
Henry Abel Whitaker.—Attorney at Law, Belair, Md.
William Whitridge Williams.—Student of Medicine.
William Wingert, LL. B., Univ. of Md., 1897.—Attorney at Law, Hagerstown.
(37)

1896.

Thomas Sewell Adams.—University Scholar.
Cornelius Beatty.—Teacher, Balt.
Augustus Caesar Binswanger.—Baltimore.
Charles Edward Caspari.—Graduate Student.
Clarence Carroll Clark.—Instructor in Modern Lang., Toledo, O.
Rev. Frank Wilbur Collier.—Clergyman, Boston, Mass.
Charles Edward Diehl.—Teacher, Berryville, Va.
William Reginald Dorsey.—Student of Law, Univ. of Md.
George Dyre Eldridge, Jr.—Student of Law, Columbia.
Albert Dale Gantz.—Student, Princeton Theol. Sem.
Alfred Dearing Harden.—Student of Law, New York Law School.
William Faithful Hendrickson.—Student of Medicine.
* Frank Holmes Johnson. * *June* 20, 1896.
Charles Harwood Knight.—Cleveland, O.
William Kurrelmeyer.—Fellow.
Robert Lacy.—Student, Mass. Inst. of Tech.
Henry Lanahan.—Portsmouth, Va.
Monroe Luchs.—Washington, D. C.
Arthur Webster Machen, Jr.—Student of Law, Harvard.
Richard Elliot Marine.—Instructor, Michigan City (Ind.) High School.
Henry Pickering Parker.—Student of Medicine.
Albert Cabell Ritchie.—Student of Law, Univ. of Md.
Louis Rosenbaum.—Baltimore.
Glanville Yeisley Rusk.—Student of Medicine.
Laurence Frederick Schmeckebier.—Graduate Student.
James Eustace Shaw.—Graduate Student.
St. George Leakin Sioussat.—University Scholar.
Alexander Raymond Stevens.—U. S. Geological Survey, Indian Terr.
John Wesley Richardson Sumwalt.—Graduate Student.
John Hanson Thomas, LL. B., Univ. of Md., 1897.—Attorney at Law, Balt.
Charles Burnet Torsch.—Baltimore.
James McConky Trippe.—Student of Law, Univ. of Md.
Charles William Waidner.—Fellow.
William Fisher Wallis.—Baltimore.
Frederick Howard Warfield. — Teacher, Balt.
John Armistead Welbourn.—Student, Va. Theol. Sem.
John Montgomery West.—Student of Medicine.
(37)

1897.

Herbert Henry Adams.—Student, Mass. Inst. of Technology.
Frederick Henry Baetjer.—Student of Medicine.
Frank Ringgold Blake.—Univ. Scholar.
Edward Lingan Bowlus.—Middletown, Md.
Charles Keyser Edmunds.—Univ. Scholar.
Howard Main Gassman.—Instructor in Mathematics and Physics, Ursinus Coll.
Neil Duncan Graham.—Student of Medicine.
Charles Saloman Guggenheimer.—Student of Law, N. Y.
Frank Arnold Hancock.—Graduate Student.
Landry Harwood.—Student of Law, Univ. of Md.
Eugene de Forest Heald, Jr.—University Scholar.
Michael Ernest Jenkins.—Student of Law, Harvard.
Harry M. Kaufman.—Student of Medicine.
Rev. Frank Albert Killmon.—Clergyman, Balt.
John Edgar Knipp.—Student of Theology, Dayton, O.
Theodore Morgan Leary.—Baltimore.
William Strobel Levy.—Student of Law, Univ. of Md.
Warfield Theobald Longcope.—Student of Medicine.
Charles Edward Lyon.—Graduate Student.
Henry Clay McComas, Jr.—Student, Union Theol. Sem., N. Y.
George Lovic Pierce Radcliffe.—Graduate Student.
Herbert Meredith Reese.—Univ. Scholar.
Alexander Henry Schulz, Jr.—University Scholar.

John Frederick Schunck.—Graduate Student.
Henry Plant Shuter.—Student of Law, N. Y.
Josiah Morris Slemons.—Univ. Scholar; Student of Medicine.
Samuel Hamilton Spragins.—Graduate Student.
Albert Steinfeld.—Student of Medicine.
James McIlhany Thomson.—Harrisonburg, Va.
Albert James Underhill.—Student of Medicine.
Louis Marshall Warfield.—Univ. Scholar; Student of Medicine.
George William Warren.—Student of Medicine.
David Emrich Weglein.—Teacher, Balt.
Dudley Williams.—Graduate Student.
Henry Merryman Wilson.—Concord, N. C.
Charles Knickerbacker Winne, Jr.—Student of Medicine. (36)

1898.

Robert Ernest Belknap.—Yonkers, N. Y.
William Cazenove Gardner.—Graduate Student.
Charles Smith Lewis (*extra ordinem*), B. D., Gen. Theol. Sem. (N. Y.), 1895.—Fellow, General Theol. Sem., N. Y. (3)

(Degrees will also be confered at the close of the academic year in June.) (535)

---

11. Proficients in Applied Electricity.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1889.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886, Ph. D., 1889.—Consulting Electrical Engineer, N. Y.
Joseph Lee Jayne, U. S. Naval Acad., 1882.—Lieutenant, U. S. Navy; Bureau of Electricity, Navy Dept., Washington.
Henry Hazlehurst Wiegand, A. B., 1885.—Electrical Engineer, Balt.
Gilbert Wilkes, U. S. Naval Acad., 1881, Lecturer, Univ. of Wis., 1892–94.—Consulting Electrical Engineer, Detroit. (4)

1890.

William Julian Albert Bliss, A. B., Harvard, 1888, Assistant, 1890–91, 1895–97, Ph. D., 1894, Lecturer, 1894–95, Instructor, Woman's Coll., Balt., 1894–95.—Associate in Physics.
James Shaler Hodges, A. B., 1886.—Electrical Engineer, Balt. (2)

1892.

*Exra Carl Breithaupt. **January* 27, 1897.
William Hand Browne, Jr., A. B., 1890.—Instructor in Electricity, Univ. of Neb.
*Henry Wakefield Frye, A. B., Colby, 1889. **June* 20, 1895.
George Henry Hutton, Jr.—Baltimore.
Robert Ernest Hutton.—Electrician, Lexington, Va.
Norman Crawford McPherson, A. B., Pa. Coll., 1889.—Westinghouse Electric Co., Pittsburg.
Hugh Pattison.—Sprague Electric Co., N. Y.
Charles William Waidner, A. B., 1896.—Fellow.
Arthur Judson Warner, A. B., Marietta, 1889. (9)

1893.

Louis Minturn Aspinwall.—Westinghouse Electric Co., Pittsburg.
Shellman Baer Brown, A. B., 1891.—Railroad Supt., Balt.
Sidney Hand Browne, A. B., 1891.—Electrical Engineer, Balt.
Eugene Russell Carichoff, A. M., Washington and Lee, 1885.—Sprague Electric Co., N. Y.
Howard Waters Doughty.—Baltimore.
Harold Mills Dyar, Ph. B., Marietta, 1888.—Electrical Engineer, Marietta, O.
Irenus Kittredge Hamilton, S. B., Trinity (Conn.), 1891.—Chicago, Ill.
William Winder Handy, S. B., Haverford, 1891.—Electrical Engineer, Baltimore.
Charles Roy McKay.—Supt., Sprague Electric Co., Salt Lake City, Utah.
William Robinson Molinard. — Amelia C. H., Va.
*Arthur Lacy Reese. **March* 12, 1894.
Arthur John Rowland.—Professor of Electrical Engineering, Drexel Inst.

William Frederick Schulz.—Electrician, Balt.

Robert Isaac Todd.—Railroad Supt., Washington, D. C.

John Boswell Whitehead, Jr.—Student Assistant. (15)

1894.

William Pierce Anderson, A. B., Harvard, 1892. - Student in Paris, France.

John Woodside Corning.—Electrician, Boston, Mass.

Lewis Warrington Cottman.—Electrician, Balt.

Harvey Cavendish Darrell.—Electrician, Balt.

Peter Conover Hains, Jr., U. S. Naval Acad., 1893.—Electrician, Baltimore.

Stephen Quentin Hayes, A. B., Georgetown (D. C.), 1892.—Westinghouse Electric Co., Pittsburg

Douglas Alexander Howard, U. S. Mil. Acad., 1878.—Captain (retired), U. S. A.

Andrew Ellicott Maccoun.—Electrician, Edison, N. J.

James Warren McCrosky, S. B., Univ. of Neb., 1891.—Electrician, Buenos Ayres, S. A.

Henry Hutchinson Norris.—Instructor in Electricity, Cornell Univ.

Charles Edward Phelps, Jr.—Electrician, Balt.

Alfred Magill Randolph, Jr., A. B, 1891.—Westinghouse Electric Co., Pittsburg.

Samuel Reber, U. S. Mil. Acad., 1886, First Lieut., U. S. A.—Instructor, Signal Service, U. S. Army.

Franklin Roberts.—Electrician, Balt.

Theodore Straus.—Electrician, Balt.

John Saunders Taylor.—Student, University of Virginia.

Frank McStocker Thomas.—Electrician in South Africa.

Wallace Durant White.—Electrical Engineer, N. Y.

James Watts Young.—Electrician, N. Y. (19)

1895.

Harry Bissing, A. B., 1895.—Electrician, N. Y.

Byron Briggs Brackett, A. B., Syracuse, 1890, Ph. D., 1897.—Instructor in Electricity, Union Coll.

Benjamin Harrison Branch.—Instructor in Electricity, Balt. Polytech. Inst.

Edson Fessenden Gallaudet, A. B., Yale, 1893, Ph. D., 1896.—Instructor in Physics, Yale.

George Henry Hill, A. B., Williamsport Dickinson Sem., 1891.—Sprague Electric Co., N. Y.

Alexander McIlver, Jr., A. B., Univ. of N. C., 1890.—Sprague Electric Co., N. Y.

Joseph Mullen, Jr.—Electrician, Balt.

Charles Reutlinger.—Electrician, Balt.

John Jacob Rothermel, A. B., Franklin and Marshall, 1893.—Graduate Student.

Frank Semple Wilcox, S. C. Mil. Acad., 1893. (10)

1896.

Matthew Maury Corbin.—Electrical Engineer, Alexandria, Va.

Isidor Deutsch.—Electrician, Balt.

Hugh Miller Frazer, S. B., Ky. State, 1889.—Electrician, Lexington, Ky.

James Holdsworth Gordon, Jr.—Electrician, N. Y.

Horace Marshall Harriman, Jr.—Electrician, Balt.

Malcolm Westcott Hill.—Electrician, Balt.

George Harwood Hodges.—Electrician, N. Y.

Jasper Alan McCaskell, S. B., Loyola, 1895.—Chicago, Ill.

George Stevens Maynard, A. B., 1894.—General Electric Co., Schenectady.

Henry Todd Powell.—Electrician, Balt.

Charles Leonard Reeder.—Electrician, Balt.

Martin Schwab.—Electrician, Balt.

James Mowton Saunders Waring.—Electrician, Balt. (13)

1897.

Wyatt Hamilton Allen, Ph. B., Yale, 1896.—Electrician, N. Y.

Joseph Hockman Bowman, A. B., Franklin and Marshall, 1893.—Instr. in Physics, etc., High School, Trinidad, Colo.

Walter Herman Eisenbrandt.—Electrician, Key West, Fla.

David Sterrett Pindell, A. B., 1895.—Electrician, Balt. (4)

(76)

12. Libraries.

1. The University Library numbers 84,000 volumes, selected with special reference to the instruction here given. It is arranged in several collections, of which these are the chief:

General Reference.	Classical.
Historical and Political.	Oriental Languages.
Mathematical and Physical.	Romance and Teutonic Languages.
Chemical.	The McCoy Art Library.
Biological.	Library of Southern History.
Medical.	

The reference library and reading room is open daily from 9 a. m. to 6 p. m.; the other rooms in accordance with special regulations.

The Library receives the publications of the leading scientific societies of the world and the chief literary and scientific periodicals. The whole number of serials received exceeds one thousand. This list is supplemented by those of the Peabody Institute and other institutions, so that the whole number of journals accessible (exclusive of ephemeral publications) exceeds twelve hundred. Important books are received by the library as soon as published, by purchase or by the courtesy of dealers.

2. The Peabody Library is a choice collection of books purchased since 1866. It is particularly full in academic transactions, long historical series, and costly illustrated books. It numbers 130,000 volumes, well bound, catalogued, and arranged. It is open daily, without charge, from 9 a. m. to 10.30 p. m.

3. The Enoch Pratt Free Library numbers over 183,000 volumes, and is open daily, without charge.

4. The Maryland Historical Society Library contains 30,000 volumes of historical works, and is open daily.

5. Other libraries of Baltimore are the New Mercantile Library (62,000 volumes), the Bar Library (15,000 volumes), the Medical and Chirurgical Library (8,500 volumes), the Maryland Episcopal Library (25,000 volumes), and the Library of the Maryland Institute (23,000 volumes).

6. Washington is so near that its museums and libraries may be easily visited. Among the chief institutions of interest to students are these:

The Smithsonian Institution and National Museum.
The Library of Congress.
The Army Medical and Surgical Museum and Library.
The U. S. Coast and Geodetic Survey.
The U. S. Geological Survey.
The U. S. Naval Observatory.
The Libraries of the Departments and Bureaus.
The Corcoran Art Gallery.

13. Regulations of the Treasurer's Office.

I. The Treasurer's Office is open daily from 9 a. m. to 4.15 p. m.

II. All bills should be presented at that place, endorsed as correct by the person under whose authority the expense has been incurred.

III. No member of the Academic Staff is allowed to incur a bill in the name of the University, unless authority is given for the same by the Trustees, in advance—either as an item in the annual budget, or as a special appropriation. Blank forms of application are provided for special requisitions.

IV. Orders for books and apparatus to be imported from Europe will not be considered authorized unless countersigned by the President or the Treasurer of the University.

All goods must be consigned to and addressed "Johns Hopkins University, Baltimore, Md." Goods for other parties (societies or individuals) must not be included in the University cases. Invoices, sworn to before the U. S. Consul, must be sent by mail, and a duplicate invoice by the following mail, both addressed to the Johns Hopkins University.

Unless otherwise ordered, goods from Europe should be sent as follows:

From Germany by the North German Lloyd steamers sailing for Baltimore from Bremen; from England by steamship lines from Liverpool to Baltimore; from France and Italy, via Havre and Liverpool.

Printed copies of instructions to shippers, which can be obtained at the Treasurer's Office, should in all cases be enclosed with the orders.

V. The Treasurer's Office will make purchases, at wholesale rates, of supplies which are required for the current needs of the University.

VI. Such pass-books as are authorized by the Treasurer should be presented for balance and settlement every month.

VII. The wages of all persons employed by the University will be paid at the Treasurer's Office.

VIII. When C. O. D. packages are expected, previous arrangements should be made for their reception.

IX. Outlays made for individuals (express parcels, postage, telegraph messages, etc.) should be settled at once.

X. An annual allowance is made by the Trustees, in the budget, for such expenses as they approve, and in deciding on the items they are governed by a consideration of the general interests of the University, as well as by the needs of special branches of instruction. Balances to the debit or credit of any account are carried forward to the new account, at the opening of each financial year (September 1). A statement of the amount of the balance and of any additional appropriation will be communicated to the parties severally interested, if requested, after the Trustees' meeting in October.

FRANCIS WHITE,
Treasurer.

14. Publications issued at the Johns Hopkins University.

The following serials are regularly issued under the auspices or with the aid of the Johns Hopkins University and the Johns Hopkins Hospital:

I. American Journal of Mathematics.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. It is now conducted by Professor Craig as Editor, with the coöperation of Professor Simon Newcomb. Nineteen volumes of about 400 pages each have been issued, and the twentieth is in progress. It appears quarterly. Subscription $5 per year. Single numbers $1.50. The set of twenty volumes will be sold for one hundred dollars.

II. American Chemical Journal.

This journal was commenced in 1879, with Professor Remsen as Editor. Nineteen volumes of about 450 pages each have been issued, and the twentieth is in progress. Ten numbers are issued yearly. Subscription $4 per year. Single numbers 50 cents.

III. American Journal of Philology.

The publication of this journal commenced in 1880, under the editorial direction of Professor Gildersleeve. Eighteen volumes of about 570 pages each have been issued, and the nineteenth is in progress. It appears four times yearly. Subscription $3 per volume. Single numbers $1. The set of eighteen volumes will be sold for fifty-four dollars.

IV. Studies from the Biological Laboratory.

(Including the Chesapeake Zoölogical Laboratory.)

The publication of these papers commenced in 1879, under the direction of Professor Martin, with the assistance of Professor W. K. Brooks. Four volumes of about 500 pages, octavo, and 40 plates each, have been issued.

V. Studies in Historical and Political Science.

The publication of these papers was begun in 1882, under the editorial direction of Professor H. B. Adams. Fifteen series are now completed and the sixteenth series is in progress. Fifteen extra volumes have also been issued. Subscription $3 per volume. A set, including the fifteen regular series and the fifteen extra volumes, will be sold for sixty-five dollars.

VI. Memoirs from the Biological Laboratory.

These monographs are issued under the editorial direction of Professor W. K. Brooks. Volume IV is in progress. Price for the set of four volumes thirty dollars.

VII. Johns Hopkins University Circulars.

The publication of these Circulars began in December, 1879, and 134 numbers have since been issued. Subscription $1.00 per year.

VIII. Contributions to Assyriology and Comparative Semitic Philology.

The publication of this journal was begun in 1889. Professor Paul Haupt, of the Johns Hopkins University, and Professor Friedrich Delitzsch, of the University of Breslau, are the editors. Volume IV is in progress. The set of three volumes will be sold for $22.50.

IX. The Johns Hopkins Hospital Reports.

These reports are edited by the Faculty of the Johns Hopkins Medical School and published for the Johns Hopkins Hospital. Their publication was begun in 1890. Volume VII is in progress. Price $5 per volume. The set of seven volumes will be sold for thirty-five dollars.

X. The Johns Hopkins Hospital Bulletin.

The publication of these Bulletins began in 1889. Volume IX is in progress. They are published monthly. Subscription $1.00 per year. The set of nine volumes will be sold for fourteen dollars.

XI. Modern Language Notes.

This journal is edited by Professor A. M. Elliott and his associates in the Modern Language Department. It appears monthly. The thirteenth volume is in progress. Price $1.50 per year.

XII. The Journal of Experimental Medicine.

The publication of this journal was begun in 1896. Professor W. H. Welch is the principal editor. It appears six times yearly. Volume III is in progress. Price $5 per year. The set of three volumes will be sold for twenty dollars.

XIII. Annual Report,

Presented by the President to the Board of Trustees, reviewing the operations of the University during the past academic year.

XIV. Annual Register,

Giving the list of the officers and students and containing detailed statements as to the regulations and work of the University.

Announcements of the Graduate, Collegiate and Medical Courses of Instruction are issued yearly and will be sent on application.

The principal separate publications issued by the Johns Hopkins Press are:—

PHOTOGRAPHS OF THE NORMAL SOLAR SPECTRUM. By Professor H. A. Rowland. Set of ten plates, $20.

These consist of ten plates, each 3x2 feet, containing two strips of the spectrum, and extending from wave-length 3000 to wave-length 6950. Concave gratings having 10,000 to 20,000 lines to the inch, made in the Physical Laboratory of the University, were used in making these photographs.

REPORTS OF THE MARYLAND STATE GEOLOGICAL SURVEY.

A NEW CRITICAL EDITION OF THE HEBREW TEXT OF THE OLD TESTAMENT. Now in progress. Prospectus on application.

A COMPLETE FACSIMILE EDITION OF THE TEACHING OF THE APOSTLES. 110 pages quarto and 10 plates. $5.00.

STUDIES IN LOGIC. 210 pages, 12mo. $2.00.

ESSAYS AND STUDIES. By Basil L. Gildersleeve. 520 pages, 4to. $3.50.

REPRODUCTION OF A SYRIAC MANUSCRIPT OF THE ANTILEGOMENA EPISTLES. 17 phototype pages. $3.00.

EMBRYOLOGY OF INSECTS AND ARACHNIDS. By Adam T. Bruce. 50 pages, 4to, and 7 plates. $3.00.

TOPOGRAPHICAL AND GEOLOGICAL MAPS OF THE VICINITY OF BALTIMORE. $1.00 each.

THE CONSTITUTION OF THE EMPIRE OF JAPAN. 50 cents.

DESCRIPTION OF THE JOHNS HOPKINS HOSPITAL. 116 pages, 4to, and 56 plates. $7.50.

JOHNS HOPKINS HOSPITAL PLANS. $5.00.

SELECTIONS FROM THE EARLY SCOTTISH POETS. By William Hand Browne. $1.25.

A MONOGRAPH ON THE GENUS SALPA. By W. K. Brooks. 400 pages and 57 plates. $7.50.

THE OYSTER. By W. K. Brooks. 240 pages and 12 plates.

BIBLIOGRAPHIA HOPKINSIENSIS. A list of publications by members of the University. Now in progress.

DISSERTATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE JOHNS HOPKINS UNIVERSITY.

15. Scientific Societies.

1. The Scientific Association, meeting under the presidency of Professor Remsen.

2. The Philological Association, meeting under the presidency of Professor Gildersleeve.

3. The Mathematical Society, of which Professor Craig is the director.

4. The Historical and Political Science Association, of which Professor Adams is the director.

5. A Naturalists' Field Club, which makes weekly excursions during the spring and autumn and holds monthly meetings for the presentation and discussion of papers.

There are also companies which meet weekly in the laboratories for the reading of the scientific journals, and seminaries in several departments of study.

---

16. Historical Statement.

The Johns Hopkins University was founded by the munificence of a citizen of Baltimore, Johns Hopkins, who bequeathed the most of his large estate for the establishment of a University and a Hospital.

1867, August 24.	Incorporation of the Johns Hopkins University.
1870, June 13.	Organization of the Board of Trustees.
1873, December 24.	Death of the Founder [born May 19, 1795].
1874, February 6.	First Business Meeting of the Trustees.
1874, December 30.	Election of a President of the University.
1876, February 22.	Inauguration of the President.
1876, October 3.	Instruction of Students began.
1886, April 26.	Celebration of Tenth Anniversary.
1889, May 7.	Opening of the Johns Hopkins Hospital.
1893, October 1.	Opening of the Johns Hopkins Medical School.

CALENDAR, 1898–99.

Commencement Day falls on Tuesday, June 14, 1898.

The first Examinations for Admission and Matriculation begin Wednesday, June 15, 1898, at 9 a. m.

The second Examinations begin Wednesday, September 28, 1898, at 9 a. m.

The instruction of classes in all departments begins Tuesday, October 4, 1898.

The Christmas Recess begins Friday evening, December 23, 1898.

Exercises will be resumed Tuesday morning, January 3, 1899.

Commemoration Day falls on Wednesday, February 22, 1899.

The Spring Recess begins Thursday morning, March 30, and closes Wednesday evening, April 5, 1899.

MATRICULATION EXAMINATIONS, 1898.

Wednesday, June 15 *and September* 28.

9–10 a. m.—History.

10–11 a. m.—Science.

11 a. m.–1 p. m.—English.

3–6 p. m.—Latin.

Thursday, June 16 *and September* 29.

9–11 a. m.—Arithmetic and Algebra.

11 a. m.–12 m.—French and German (*elements*).

3–6 p. m.—Plane and Solid Geometry.

Friday, June 17 *and September* 30.

9–10.30 a. m.—Trigonometry.

10.30 a. m.–12 m.—Analytic Geometry.

3–6 p. m.—Greek.

3–6 p. m.—French and German (*minor courses*).

3–4 p. m.—German (*elements*).

STATEMENTS IN RESPECT TO THE COURSES OF INSTRUCTION.

The Faculty of Philosophy in the Johns Hopkins University was organized in 1876 for the instruction of young men in languages, literature, and science.

The Faculty of Medicine was fully organized in 1893 for the instruction of young men and young women who desire to proceed to the degree of Doctor of Medicine.

In the Faculty of Philosophy, the instruction is carried on by university methods and by collegiate methods corresponding with the requirements of students at different stages of their advancement. University instruction is offered to those who have already taken an academic degree, or who have otherwise fitted themselves to pursue advanced courses of study. Collegiate instruction is offered to undergraduates, who have the choice of several prescribed courses of study, all of them leading up to the degree of Bachelor of Arts.

In the Faculty of Medicine, students who have acquired a liberal education by a course of study that included chemistry, physics, and biology, with Latin, French, and German, are received; and a four years' systematic course, with special opportunities for laboratory work and for clinical observation, is provided for them. Those who have already received the degree of Doctor of Medicine may be admitted as attendants on lectures.

FACULTY OF PHILOSOPHY.

Advanced and graduate students are received with or without reference to their being candidates for a degree, and they are permitted to attend such lectures and exercises as they may individually select. On entering the University they are expected to present their diplomas and certificates from the institutions with which they have been connected, and also letters of introduction. They are not examined for admission by the University, but each instructor satisfies himself of the attainments of those who wish to follow his guidance before admitting them to his classes.

The professors are free to give personal counsel and instruction to those who seek it; books and instruments adapted to investigations and advanced work have been liberally provided; the system of fellowships secures the presence of twenty special students imbued with the university spirit, most of them looking forward to academic careers; seminaries limited to a few advanced students have been organized in various subjects; societies devoted to philology, to mathematical, physical, and natural science, and to history and political science, afford opportunities for the presentation of memoirs and original communications, and there are also clubs for the reading and discussion of philological, biological, physical, and chemical papers; during the year courses of lectures are given by resident and non-resident professors on topics to which they have given special attention; the libraries of the Peabody Institute and Maryland Historical Society, founded for the advantage of scholars, are easily accessible; the issuing, under the auspices of the Trustees, of publications devoted to mathematics, chemistry, philology, biology, the modern languages, and history brings the University into advantageous connection with other foundations; and the University reading-room, which is constantly open, is liberally supplied with new and with standard books and with the literary and scientific journals of this and other lands.

Instruction is carried on in the different departments by methods which vary with the nature of the subject and the character and proficiency of the scholars; but in all alike the aim is the same,—

that, while the student is becoming familiar with the work prosecuted and the results attained elsewhere, and is adding to his general intellectual culture, he may be encouraged to become himself an independent and original investigator in his chosen field of labor. Within reasonable limits the University will provide such books, apparatus, and material as may be requisite for this purpose.

The principal subjects in which advanced instruction is now provided are these:

Greek.
Latin.
Sanskrit and Comparative Philology.
Semitic Languages.
Anglo-Saxon and English.
German.
Romance Languages.
History.
Political Economy.
Comparative Politics.
History of Philosophy.
Mathematics.
Astronomy.
Physics, including Applied Electricity.
Chemistry.
Geology, Mineralogy, and Petrography.
Biology, including Physiology and Morphology.
Pathology.

Greek.

The graduate instruction in Greek is directed by Professor Gildersleeve, in connection with the Greek Seminary, which consists of the Director, Fellows, and Scholars, and such advanced students as have satisfied the director of their fitness for an active participation in the work. All graduate students, however, may have the privilege of attending the Seminary exercises.

Each regular member is required to take his turn in the regular work of the seminary, and special fields of research are assigned according to progress or bent.

The cycle which has been followed for some years is made up of the Greek Historians, the Attic Orators, Plato, Aristophanes. For example:

1894–95.	Aristophanes.	1896–97.	Attic Orators.
1895–96.	Greek Historians.	1897–98.	Plato.

The methods followed have been described in successive annual reports, which may readily be consulted.

The work in the Seminary during the current year was concentrated on Plato; for the next year the centre of work will be transferred to Aristophanes.

In addition to the work of the Seminary (two meetings a week), courses of lectures are given by the Director and by other qualified persons.

Undergraduate students who select the classical group of studies are required to follow the class-work in Greek, four hours weekly through two years. The texts read vary from year to year, including selections from poets, historians, and orators. Exercises in Greek composition and in reading at sight are likewise required. To extend the acquaintance of the student with Greek literature, he is obliged to read by himself certain prescribed authors, and to pass an examination upon them. An elective course of two hours a week for a half-year is also provided. The instruction of the undergraduates in Greek is conducted chiefly by Associate Professor Spieker.

The American Journal of Philology, edited by Professor Gildersleeve, has completed its eighteenth volume, and the nineteenth is now in progress.

Latin.

Instruction in Latin is given on a plan similar to that already mentioned as followed in the courses in Greek. The advanced work proceeds through the organization of a Seminary, of which Professor Warren is the Director. The instruction has two distinct ends in view. It aims first to give to students a wider and more accurate knowledge of the Latin language and literature than can be secured in the ordinary college course, so that they may become more efficient teachers; and, secondly, to train them in the methods of scientific research, so that they may become independent investigators. The most important instrument of training is the Latin Seminary, which meets twice a week during the year. Each year some author or a group of closely connected authors is made the centre of work. Critical methods are taught, interpretations are prepared by members of the Seminary in turn, and papers are read by them containing the results of special investigations on the syntax and style of authors and on other

themes. The subjects treated during the last four years have been as follows:

1894–95. Roman Satire, especially Horace and Juvenal.
1895–96. The Roman Historians, especially Livy and Tacitus.
1896–97. The Roman Epic, especially Vergil.
1897–98. The Roman Drama, especially Plautus and Terence.

Courses of lectures are also given from time to time by the Director of the Seminary. For example, in 1897–98, Professor Warren lectured on the Roman Comic Poets once a week during the first half-year, on Latin Inscriptions once a week throughout the year, and on Roman Topography once a week in the second half-year. Throughout the year a Journal Club met every two weeks to report and discuss recent philological publications in the field of Latin. A class, meeting once a week in the first half-year, read selections from Aulus Gellius. A Pro-Seminary under the direction of Dr. Smith was engaged in the interpretation of Tibullus.

The undergraduate work in Latin varies somewhat according to the group of studies chosen. The works read differ year by year, but are so chosen that the student may become acquainted with historical, poetical, and philosophical authors. His work in the class-room must be supplemented by a prescribed course of reading which he follows privately and on which he undergoes examination. Latin composition and sight-reading form a part of the course. Associate Professor Smith and Dr. H. L. Wilson assist in this work.

Sanskrit and Comparative Philology.

Courses of instruction, under the direction of Professor Bloomfield, with the assistance of the Fellow in Sanskrit, are provided in the Indo-Iranian languages (Vedic and Classical Sanskrit, Pāli-Prākrit, Avestan or Zend, and Old Persian), in comparative grammar of the Indo-European languages, in historical ethnology of the Indo-European peoples, in general linguistic science. During the session of 1897–98 a course in the Lithuanian language and literature was given for the first time, and instruction in one or the other of the ancient languages of the Balto-Slavic

(Lithu-Slavic) family may be hereafter expected as a regular feature of the work of the department.

These instructions aim to meet the wants of those who wish to devote themselves to the study of these branches exclusively and for their own sake, *i. e.*, those who wish to become specialists in Sanskrit philology, or comparative philology; and also the wants of students of languages in general, who wish to obtain a broader linguistic basis for special studies in other departments of philology.

The advanced work aims especially to meet the wants of those who wish to make Indian philology or comparative philology their special study. Instruction is given by practical exercises, lectures, seminary work, and, where possible, the use of native Sanskrit manuscripts. The seminary is furnished with a carefully selected library, and approximately complete sets of the Oriental journals, as well as the journals in comparative philology, are freely accessible in the main library.

A prolonged course in Sanskrit, involving two lectures a week during two years and attendance in the Vedic Seminary for a half-year (one hour a week), is planned so as to furnish a good knowledge of classical Sanskrit, and to include an introduction into the dialect of the Vedas. This amount of work represents material sufficient for the first subsidiary subject for the degree of Doctor of Philosophy. A course in the same study for one and a half years, involving two hours a week, is the amount required for a second subsidiary subject leading to the same degree.

A synopsis of the courses offered during recent years may be presented under five heads:

I. Courses in the general principles of comparative philology or linguistic science, and on special chapters thereof; lectures on ethnology.

II. Courses in the general comparative grammar of the Indo-European languages; comparative grammar of Sanskrit and Avestan; comparative study of Greek accent; comparative study of Greek, Latin, Sanskrit, and Teutonic, including vocalism, consonantism, noun-formation, and inflections.

III. The Vedic, Sanskrit, and Pāli-Prākrit dialects: Rig-Veda; Atharva-Veda; literature of the Brāhmaṇas and Upanishads. The law-books of Manu and Yājñavalkya; Çakuntala and introduction into Prākrit; Hitopadeça, Kathāsaritsāgara, and Nala. Sanskrit grammar and prose-composition.

IV. The Avestan language and the literature of the Avesta.

V. Introduction to the Lithuanian language and literature.

Oriental Seminary.

In the Oriental Seminary, of which Professor Haupt is Director, both introductory and advanced instruction is provided in Oriental history and archæology, as well as in the principal Semitic languages, *viz.*, Hebrew (both Biblical and post-Biblical), Biblical Aramaic, Syriac, Arabic (both classical and modern), Ethiopic, etc., and in Assyriology in its various branches. In the organization adopted in 1883, a course of three years was arranged. The centre of work is the Old Testament, special attention being given to the critical study of Biblical texts and the cuneiform inscriptions bearing on the Scriptures. Professor Haupt is assisted by Dr. Christopher Johnston.

The various courses are adapted to the requirements of four classes of students, namely: (*a*) students of theology wishing to obtain a thorough acquaintance with the sacred tongue and its sister idioms as a means of elucidating Scripture and problems of the comparative history of religion; (*b*) students of linguistics intending to make comparative grammar of the Semitic languages their specialty; (*c*) students of Oriental history and archæology desirous of drawing directly from the original sources; (*d*) persons looking for instruction in the living Oriental languages (as modern Arabic or Turkish) for practical purposes.

In these various courses, the seminary method is followed throughout, the student being from the first brought face to face with the several idioms, without long theoretical introductions. Stress is laid on a thorough grammatical training, imparted in connection with the minute philological analysis of some selected text in the respective languages, printed grammars serving only for occasional reference.

A room has been set apart containing a well-equipped working library for all the branches of Oriental research (including the library of the late Professor A. Dillmann, of Berlin, and the Strouse Rabbinical Library), and some advanced students are usually present to help in the preparation for the recitations conducted by the Director of the Seminary, and to furnish any other aid that may be desired.

English.

The instruction in English is given by Dr. James W. Bright, Professor of English Philology, Dr. William Hand Browne, Professor of English Literature, and Dr. Herbert Eveleth Greene, Collegiate Professor of English. Graduate and collegiate courses are provided in conformity with the principles followed in the other language departments. Advanced students are instructed in the technical results of linguistic and literary science, and trained in the processes of original investigation. The college work is arranged upon a plan that prescribes for every student a systematic training in English Composition and in a critical study of standard prose. This is followed by an introductory course in English literature which is required of all students except those pursuing the studies of the Modern Language Group (Group VII); and a more advanced course is provided for those who may wish to continue the subject. The work of students in the Modern Language Group includes, first, a general survey of the history of English literature from the earliest times to the present day. After this preliminary course, more definite and minute study is bestowed upon prolonged courses that centre in the most significant periods of that history: these are courses in Anglo-Saxon; in the language and literature of the Middle English Period, and especially Chaucer and his contemporaries; in the Early Scottish Poets; in the Elizabethan period; and in the chief writers of the eighteenth and nineteenth centuries.

Graduate Courses.

The advanced courses in English are so arranged as to enable a student, in three or four consecutive years, to study with precision all the important departments of Grammar and of Literature. Instruction is imparted by lectures, by freer conferences, by the methods of the Seminary, and by class-room recitation. The Seminary (four hours a week) constitutes the chief organ of instruction and research. It supplies means for the inculcation of what is presented in the lectures, and for organized and prolonged concentration of effort on selected subjects. Usually the work of the Seminary centres each half-year in a different period

of the literature, ranging from Anglo-Saxon to the present century. The literature of the period studied is investigated as to its sources, the history of its forms and traditions, and its artistic value; and linguistically the period is studied in its relation to the history of the language. The members of the Seminary also meet as a Journal Club (fortnightly) chiefly for reviewing the current philological (linguistic and literary) periodicals, and recently published books and monographs. As supplementing the lectures and the Seminary, classes are organized for special training in textual criticism. There is also in alternate years an advanced course in the History and Theory of Rhetoric by Professor Greene, and annually a course of lectures on some department of English literature by Professor Browne. Weekly conferences and informal lectures furnish an opportunity for the discussion of many topics not provided for in the regular courses of the year. This hour is also in part occupied by lectures given by the students, who may thus acquire experience in the more formal presentation of the results of special study.

College Courses.

1. *Rhetoric and English Composition.* In this course, which is required of all undergraduates, the principles of good writing are inculcated. The use of text-books is supplemented by lectures and discussions, by weekly practice in the writing of short papers, a few of which are read and criticised in the class-room, and by the writing of longer papers, which are read and criticised privately with the writers. During the first half-year the study is directed to the elements of style,—the word, the sentence, and the paragraph. The weekly practice in writing is combined with an examination of the usage of standard writers. During the second half-year the various forms of composition—description, narration, exposition, and argument—are studied and practiced; the work also includes a critical study of standard prose in its various forms.

2. *English Literature.* The course in Rhetoric is followed by a prescribed course in English literature; and an additional course, which is elective, is provided for those who may wish to continue the study. These courses are for undergraduate students in Groups I–VI,—those who are not making a special study of the subject, but who wish such acquaintance with it as may be

English.

The instruction in English is given by Dr. James W. Bright, Professor of English Philology, Dr. William Hand Browne, Professor of English Literature, and Dr. Herbert Eveleth Greene, Collegiate Professor of English. Graduate and collegiate courses are provided in conformity with the principles followed in the other language departments. Advanced students are instructed in the technical results of linguistic and literary science, and trained in the processes of original investigation. The college work is arranged upon a plan that prescribes for every student a systematic training in English Composition and in a critical study of standard prose. This is followed by an introductory course in English literature which is required of all students except those pursuing the studies of the Modern Language Group (Group VII); and a more advanced course is provided for those who may wish to continue the subject. The work of students in the Modern Language Group includes, first, a general survey of the history of English literature from the earliest times to the present day. After this preliminary course, more definite and minute study is bestowed upon prolonged courses that centre in the most significant periods of that history: these are courses in Anglo-Saxon; in the language and literature of the Middle English Period, and especially Chaucer and his contemporaries; in the Early Scottish Poets; in the Elizabethan period; and in the chief writers of the eighteenth and nineteenth centuries.

Graduate Courses.

The advanced courses in English are so arranged as to enable a student, in three or four consecutive years, to study with precision all the important departments of Grammar and of Literature. Instruction is imparted by lectures, by freer conferences, by the methods of the Seminary, and by class-room recitation. The Seminary (four hours a week) constitutes the chief organ of instruction and research. It supplies means for the inculcation of what is presented in the lectures, and for organized and prolonged concentration of effort on selected subjects. Usually the work of the Seminary centres each half-year in a different period

of the literature, ranging from Anglo-Saxon to the present century. The literature of the period studied is investigated as to its sources, the history of its forms and traditions, and its artistic value; and linguistically the period is studied in its relation to the history of the language. The members of the Seminary also meet as a Journal Club (fortnightly) chiefly for reviewing the current philological (linguistic and literary) periodicals, and recently published books and monographs. As supplementing the lectures and the Seminary, classes are organized for special training in textual criticism. There is also in alternate years an advanced course in the History and Theory of Rhetoric by Professor Greene, and annually a course of lectures on some department of English literature by Professor Browne. Weekly conferences and informal lectures furnish an opportunity for the discussion of many topics not provided for in the regular courses of the year. This hour is also in part occupied by lectures given by the students, who may thus acquire experience in the more formal presentation of the results of special study.

College Courses.

1. *Rhetoric and English Composition.* In this course, which is required of all undergraduates, the principles of good writing are inculcated. The use of text-books is supplemented by lectures and discussions, by weekly practice in the writing of short papers, a few of which are read and criticised in the class-room, and by the writing of longer papers, which are read and criticised privately with the writers. During the first half-year the study is directed to the elements of style,—the word, the sentence, and the paragraph. The weekly practice in writing is combined with an examination of the usage of standard writers. During the second half-year the various forms of composition—description, narration, exposition, and argument—are studied and practiced; the work also includes a critical study of standard prose in its various forms.

2. *English Literature.* The course in Rhetoric is followed by a prescribed course in English literature; and an additional course, which is elective, is provided for those who may wish to continue the study. These courses are for undergraduate students in Groups I–VI,—those who are not making a special study of the subject, but who wish such acquaintance with it as may be

regarded a necessary part of a liberal education. The aim of the instruction in these courses is to give the student an outline history of English Literature, to teach him to read intelligently and with insight, and to lead him to read widely in the works of the more important writers.

The Major and Minor Courses are followed by those undergraduates whose studies are directed more especially to modern languages and their literature (Group VII).

3. In the English Minor a general course in English literature, from the earliest to recent times, is given, the text-book being Tyler's edition of Morley's *Manual.* In addition to the questions suggested by the text-book, the instructor supplements the work by oral instruction, the object being to make this course not a mere memorizing of names, works, and dates, but to give the class some living acquaintance with the more important authors, and to enable them to get some grasp of the literature as a continuous whole. The other part of this course consists of a study of the writers of the Early and Middle English periods, Morris and Skeat's *Specimens* being used as a text-book. The changes which both the language and the literature underwent during this transitional and formative period are dwelt upon, showing by what stages and under what influences Modern English was developed.

The major course in English—a third year's course—is divided between linguistic and literary studies.

4. *Anglo-Saxon.* An elementary course in Anglo-Saxon prose and verse occupies two hours a week for one year. The text-book used is Bright's *Anglo-Saxon Reader.*

5. In the literary part, one hour a week is given to the Early Scottish Poets from Barbour to Lyndsay, whose work continues the great tradition of English literature during the otherwise somewhat dim period from Chaucer to Surrey. The texts are studied in a reader especially prepared for this class, and the necessary supplemental information, historical and other, is given by the instructor.

6. One hour a week is also given to the study of some important period of literature or group of writers sufficiently characteristic to be regarded as a whole. For the first half-year the Elizabethan

writers have usually been taken, including the reading by the class of one play of Shakespeare. For the second-half some other period or group is selected.

It will be seen that the undergraduate work in the Major and Minor courses comprises: the earliest English or Anglo-Saxon; the transitional literature from the Anglo-Saxon to Chaucer; the great period of Scottish literature between the times of Chaucer and Elizabeth, the great Elizabethans, and some important later period.

German.

This group of studies is under the direction of Professor Wood, assisted by Dr. B. J. Vos, Associate in German, and Dr. T. S. Baker.

Instruction is provided in German of all periods, and in the earlier development of the other members of the Teutonic family of languages.

In the German Seminary, in which the graduate instruction centres, nearly equal attention is devoted to German Literature and German Philology. To enter upon the work of the Seminary in literature, the student should possess a knowledge of German equivalent to that imparted in the undergraduate courses, hereinafter mentioned, supplemented by private readings. For the seminary work in philology, it is desirable, in addition, that preliminary courses in Gothic and Middle High German should be first completed, and these may be taken with advantage by the student immediately upon entering. All graduate students of German are required to share in both the philological and literary work, and to direct their efforts to the attainment of broad results, which may serve as the foundation of scientific work and of successful teaching; but the Seminary and the allied graduate courses are believed to offer also sufficient opportunity and encouragement for the prosecution of chosen lines of work, whether on the linguistic or literary side, in accordance with individual capacity and bent. In this way, opportunity for independent research is afforded, within the framework of organized effort directed towards the attainment of results which con-

cern the Seminary as a whole, and towards which each member is expected to contribute his share.

The subjects selected for the Seminary during recent years have been as follows:

1891–92. Otfried's Evangelienbuch; Minnesangsfrühling.
1892–93. Walther von der Vogelweide; the Period of "Sturm und Drang."
1893–94. Parzival; Goethe's Faust.
1894–95. Minnesangsfrühling; German Literature in the Eighteenth Century.
1895–96. Goethe and Schiller (1786–1805); Walther von der Vogelweide.
1896–97. Goethe's Faust; Parzival.
1897–98. Goethe's Lyrical Poems; Nibelungenlied.

The Germanic Society, which meets fortnightly, supplements the work of the German Seminary; before it are presented not only reports on articles in current journals, but also successive results of studies by the members. The chief object of the Society is to foster and guide the aptitude for more sustained individual investigation than the Seminary proper offers scope for. Lists of the papers presented and discussed are given in the yearly reports.

In addition to the work of the Seminary (three meetings a week), other advanced courses are given. For example, in 1897–98, Professor Wood lectured on The Classical and Romantic Elements in Schiller's Dramas and gave courses in Gothic and Old Saxon (Heliand). Dr. Vos conducted classes in German Literature in the 11th century, Middle High German (Meier Helmbrecht), and Modern Dutch. A course on The German Novel in the 18th and 19th centuries was given by Dr. Baker.

The undergraduate courses in German are conducted chiefly by Dr. B. J. Vos, aided by Dr. T. S. Baker, with such other assistance, as may from time to time be required. A course in elementary German is given for candidates for matriculation who have entered with Greek. This is followed by the regular work in German during the first college year, a course required of all undergraduates. Nearly equal portions of the German drama and of German literary prose are read. Private readings and weekly exercises in prose composition supplement the class readings.

Undergraduates in Group VII who elect German, or undergraduates in any of the seven groups who substitute German at this point in their course, pursue the study during a second year. The readings from the classical period are continued in texts of greater difficulty, and instruction is given in the history of German literature and in the writing of German prose.

An elective course (rapid reading of contemporary literature) is offered to undergraduates who have completed the work in German of the first college year. A second elective in scientific readings is open to undergraduates who are preparing to enter the Medical School.

Classes are also provided in Conversational German and in Scientific German Prose, for graduates who lack the ability to read the language at sight.

Romance Languages.

Advanced instruction in Romance Languages is so planned as to cover at least three years, and is directed by Dr. A. Marshall Elliott, Professor of Romance Languages, with the assistance of Dr. Rambeau, Dr. Marden, Dr. Armstrong, and others. The subjects of instruction are divided into three distinct sections: a purely linguistic, a purely literary, and a composite group which is intended to unite the first two. Every one who intends to take a degree in Romance Languages must work in these three lines, which are so arranged as to supplement one another according to the attainments and bent of the student, and which are concentrated, for given periods of the course, on the same linguistic domain. The first year is chiefly spent in preparation for seminary work, to which the student is generally admitted, as an active member, at the beginning of the second year. During this preliminary period a practical knowledge of the principal Romance languages is acquired (a thorough acquaintance with Latin and modern French being pre-supposed); a brief survey is given of the history of the science, together with an introduction to the use of scientific methods in language and literature. With this equipment the student is prepared to begin an appreciative scrutiny

of special texts with their critical linguistic and literary apparatus. He is taught to handle his materials with discriminating judgment, and, according to his progress, subjects are assigned to him for investigation which tend to develop the patience and accuracy necessary to a careful investigator. In literature, as in language proper, it is particularly to the origins that his attention is directed, though constant reference is made, by way of comparison, to the modern forms. By extensive reading required in connection with the subjects taken up, he is made familiar with the different phases of opinion held by leading European scholars, and is thus enabled to control certain parts of his subject within well-defined limits. After the first year the student is expected to concentrate upon some single line of work within his general field. It will be observed that the student's work in this course is comparative, and that he moves from the general to the particular. In the early part of it, the object is to give a broad basis to work on, by making him so familiar with the principal Romance idioms that he may use them readily, by way of illustration, in his subsequent studies. Dialect study and phonology are made essential features of this plan of studies.

The subjects to which attention has been given in the Seminary in past years are as follows:

1883–84. Anglo-Norman Dialect and the Oaths of Strasburg.
1884–85. Cantilène de Sainte Eulalie and Fragment de Valenciennes.
1885–86. The Franco-Norman Dialect, with the Vie de Saint Alexis.
1886–87. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1887–88. Old French Paraphrase of the Canticum Canticorum and the Fragment de Valenciennes.
1888–89. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1889–90. *Reimpredigt:* Grant mal fist Adam.
1890–91. L'Epopée royale: Pèlerinage de Charlemagne.
1891–98. Marie de France: Fables.

In addition to the work of the Seminary, lectures are regularly given at stated periods of the course: (1) on French phonetics, physiological and historical, (2) on Old-French syntax, (3) on Romance morphology, (4) on French dialects, (5) on Italian dialects, (6) on Old-French palæography, (7) on the history of French Philology, (8) on the linguistic ethnography of France and Italy, (9) on the sources of Romance philology, (10) on

Popular Latin, (11) on Italian philology and literature, (12) on Spanish philology and literature, (13) on Old-French literature, (14) on Modern-French literature, (15) on Romance versification.

The special lectures on French literature are arranged to run through the whole period of three years, and form an important part in the training of the student.

A special publication, Modern Language Notes, now in its twelfth volume, is issued monthly by members of the modern language departments, in which are presented the most recent literary and scientific aspects of linguistic research in the modern idioms.

The undergraduate classes in French are conducted by Associate Professor Rambeau, with several assistants. Students in Group VII who elect French follow class work for four hours weekly through two years, during which time they read extensive selections from Modern and Middle-French texts, and are made acquainted with the general laws of French phonology and morphology. All undergraduates must complete the work of the first of these two years. Private reading is required, varying from year to year according to the authors taken up in class.

Courses in Italian and Spanish, corresponding in extent and thoroughness with those in French, are also provided for undergraduates.

History, Economics, and Politics.

The work of this department is under the direction of Professor Herbert B. Adams, who devotes special attention to institutional and educational history. He is aided by Associate Professor J. M. Vincent, in European history; Associate Bernard C. Steiner, in American history; Dr. J. C. Ballagh, in classical history; and Mr. G. C. Lee, in English history. In economics, the work is guided by Associate Professor Sidney Sherwood, aided by Dr. J. H. Hollander, associate, and Dr. H. L. Moore, lecturer in economics. In politics, systematic instruction throughout the year is given by Dr. W. W. Willoughby, associate.

As at present organized, the work of the department aims to accomplish three main results:

1. The preliminary training of students, both graduate and undergraduate, to such a knowledge of the essential facts and principles of general history and politics as will contribute towards a liberal education and serve to fit men to pursue advanced courses in special branches of these sciences, with a view to taking the doctor's degree or to entering the work of education, law, journalism, charity organization, or the civil service. This training process is pursued in undergraduate class courses, where systematic and positive instruction is given by means of required text-books, lectures, essays, oral reports, and constant drill. The undergraduate work extends in its various sections, over a period of three years (see College Courses, Sixth Group, beyond). A course in European History, taken in connection with the outlines of Economics, is also required of every undergraduate student not in the Historical Group. Graduates of other institutions who have not had the equivalent of these preliminary courses in History and Politics, or who do not possess a knowledge of French and German, are expected to make up their deficiency by extra work in undergraduate classes.

2. Advanced instruction in history, economics, politics, social science, statistics, historical and comparative jurisprudence, historical criticism, methods of research, historiography, for graduates or special students of mature years, if qualified by ability and previous studies to pursue such courses. Undergraduates pursuing a course for the bachelor's degree are not allowed to take graduate work. Advanced instruction is given chiefly by lectures, accompanied by private readings by the students, and by frequent examinations, both oral and written, upon special subjects.

3. The development of a spirit of original research among the more advanced members. This end is attained chiefly in individual ways by the constant association and co-operation of students and instructors, not only in advanced classes and in various fields of special work, but in organized societies called Seminaries, or Conferences, of History, Economics, and Education, meeting in the department library for the report and discussion of original studies. Political, social, and educational conferences are also held. The scientific researches of graduate students are not only in fields of American institutional and economic history, but also in the broader domain of comparative politics and economics,

social science, and education. The best results of original and organized inquiry by this department are published in the volumes of "Historical Studies." Under the direction of Professor Adams, the history of higher education in the United States is being written by students and collaborators representing individual States. The results are published by the U. S. Bureau of Education. The results of original economic investigation have hitherto appeared in the "Studies," in the Publications of the American Economic Association, and in leading economic journals.

The following general statement will suffice to characterize the various courses of instruction. Details may be found in the annual announcements.

(*a*) *History.*—Professor Adams gives to graduate students six courses of lectures (two courses each year) upon institutional history. He selects representative phases of ancient and modern civic society. One half of the first year is devoted to the early history of institutions and to Greek politics; the second half, to the history of Prussian politics and the nineteenth century. The first half of the second year is given to Roman constitutional history; the second half to French absolutism and the history of the French Revolution. In the third year particular attention is given to German peoples and their early migration and federations, during the first half; during the second half, to Anglo-American institutions. Each year's work is independent and complete in itself. Professor Adams also gives courses of undergraduate instruction in the history of civilization, Church history, the Italian Renaissance, and the history of international relations.

Dr. James Schouler, author of the History of the United States under the Constitution, gives in successive years short courses of lectures on American political and economic history.

Dr. Vincent lectures to graduates on (1) the social and economic history of Europe, (2) the Reformation and the Protestant Revolution, (3) the science of historical investigation and the general history of historical writing. He also conducts (4) a special conference of graduate students in the study of selected historical problems, and has charge of undergraduate courses (5) in European history, (6) in general Mediaeval and Modern history.

Dr. Steiner conducts an undergraduate course in American political and constitutional history.

Dr. Ballagh has collegiate classes in Greek and Roman history.

Mr. Lee conducts a collegiate course in English Constitutional Law and History; also courses in Forensics and Public Speaking.

(*b*) *Comparative Politics.*—Dr. Willoughby gives annual courses of class lectures upon the following subjects: (1) Theory of the State; (2) The Federal State in Theory and Practice; (3) History of Political Philosophy.

(*c*) *Economics and Social Science.*—Systematic instruction is offered both in the general theory and in the most important special fields of economic science. Effort is directed to promote the mastery of sound methods of research. Considerable attention is given to the history of the science itself as one of the best means of studying the development of economic life and institutions.

Dr. Sherwood conducts the following graduate courses: (1) Economic Seminary, meeting two hours weekly; (2) nine courses of lectures, planned to extend over a period of three years, the subjects being (*a*) theory of credit, (*b*) corporations, (*c*) principles of economics, (*d*) transportation, (*e*) French economists, (*f*) banking, (*g*) money, (*h*) law and economics, (*i*) economic sociology.

Dr. Hollander lectures upon (1) science of finance, (2) history of economic theories, (3) financial and industrial history of the United States. In 1896–97, his courses were (*a*) the theory and practice of municipal finance, (*b*) the history of economic thought before Adam Smith. In 1897–98, he considered, during the first half of the year, the economic system of David Ricardo; the second half, he reviewed the development of commonwealth taxation in the United States. Dr. Hollander has also conducted a class in the study of Current Congressional History.

Dr. Moore lectures on (1) application of mathematics to economics, (2) trusts, (3) German economics.

Undergraduate instruction, conducted by Doctors Sherwood and Hollander is given as follows: (1) Course in general economics (Minor Politics), four hours weekly throughout the year, required of students in group VI; (2) course in general economics, two hours weekly throughout the year: taken in connection with a

two-hour course in European History, this forms the History-Economics course required of all undergraduates not in Group VI; (3) advanced economics, two hours weekly throughout the year, open as an elective course to students who have taken either (1) or (2).

The Historical Library.

The department of History and Politics occupies a suite of seven well-lighted rooms on the third floor of McCoy Hall. The centre of activity is the Bluntschli Library, or Seminary, which contains tables and working desks for the graduate students. Here are to be found the books and manuscripts of the late Professor Bluntschli, of Heidelberg, whose library was purchased by German citizens of Baltimore, and generously presented to the University in 1882. With the Bluntschli papers are the MSS. and works of his two friends, Francis Lieber and Edouard Laboulaye. On the tables are the chief periodicals of the world in the domain of History, Politics, and Economics. The walls and cases are decorated with engravings and busts of eminent historians and statesmen. This room is a study, or laboratory, of historical investigation, in which each graduate student has his appointed place. The department has a skilled librarian to give assistance and advice, and a special catalogue is provided for the 18,000 books and 50,000 pamphlets belonging to the historical collection. Noticeable among the books is a case containing the thirty or more volumes of Studies written by graduates of the Historical Department, including the series published by the University and the Contributions to American Educational History, published by the United States Bureau of Education. An adjoining room is devoted to the study of European History and another beyond to Economics. In both, the walls are lined with books appropriate to the work and with views of historical monuments and portraits of great men. The rooms are provided with tables and chairs, instead of formal desks or benches, so that the classes meeting here are friendly conferences amid an environment of books. While all the work of the department is more or less co-operative, the special Historical Seminary of former years has developed from one weekly meeting into five conferences, historical, political, economic, and educational.

Across a broad corridor is a room devoted to the study of Jurisprudence and Comparative Politics. Here the books on English, French, German, American, and International Law occupy the available wall space, so that lectures on the English Constitutional History, the Federal State, and kindred subjects, are given with the works of reference immediately at hand. A complete set of the original and the printed documents used in the Alabama case at Geneva is the gift of Mrs. J. A. J. Creswell, whose husband was Counsel for the United States. Adjoining this room is the department of Southern History. The walls and the interior space are taken up with collections of books and materials relating to the history and literature of the Southern States. Special cases contain a valuable collection on Slavery presented by the late General Birney, of Washington. The central cases exhibit in about 400 pamphlet boxes the printed Americana, given by Colonel J. Thomas Scharf, while closed lockers contain the valuable Colonial and Revolutionary manuscripts also presented by Colonel Scharf. In museum cases are shown interesting documents, autographs, and relics relating to the South, while portraits of the distinguished historians and statesmen of that section are arranged in appropriate groups. Among them are the Calverts, Calhoun, William Wirt, John P. Kennedy, Reverdy Johnson, Chief Justice Taney, General Lee, Jefferson Davis, S. Teackle Wallis, and others. In an adjacent side corridor the public documents of the U. S. Government have been arranged along the walls from floor to ceiling. Thanks to our representatives in Congress and to the generous attention of the Superintendent of Documents at Washington, this necessary and material aid to the study of American History is unusually complete.

The end of the main corridor has been attractively furnished with carpet, chairs, and table, affording a convenient place where students may gather between classes for social intercourse. At this point the walls are adorned with large engraved portraits of the fathers of the Constitution and the great American historians. A bust of Alexander Hamilton, presented by Mr. John M. Glenn, is an original by Caracci. A bas-relief of Chief Justice Marshall is a unique original from which the bronzes of the Marshall prize have been made. This prize given annually for the best

published work by a graduate in the field of History is one of the most highly valued awards in the gift of the University. This cheerful academic corner forms a convenient connecting link between the Seminary Room and the main Lecture Room. In the latter are chairs and tables for the larger classes, and also cases for the greater part of the archæological museum of the department. The Mayer collection of ancient implements illustrates the development of man through the stone age; the Ellinger collection of relics of the Lake Dwellers shows the transition from the stone to the bronze age; the Cohen collection of Egyptian antiquities forms a large and representative museum of genuine relics illustrating the life and beliefs of ancient Egypt; barbaric implements of war from various stages of savagery decorate the walls. In this room, devoted to lectures on history, are also portraits of the men who have been the leaders of investigation in classical and European history; Niebuhr, Ranke, Curtius, Mommsen, Ihne, De Tocqueville, Arnold, Freeman, Stubbs, Seeley, Froude, and others look down upon the men who are studying their works. Additional museum cases in the corridors contain Indian relics presented by the Maryland Academy of Sciences, implements from Alaska, and other illustrations of primitive life. In the Bluntschli Library is the Helbig collection of Greek and Roman coins, a valuable adjunct to the study of classical history. All these collections are kept before the eyes of the students and are used for the instruction of classes. In the use of the books there are but few restrictions, the shelves being open at all times to men of all departments of the University.

Adjoining the large lecture room is the office and library of the Director of the Historical Department. This is also the editorial room of the Johns Hopkins Studies in Historical and Political Science, and a convenient place where students may consult Professor Adams in regard to their work. Thus, amid an extensive and pleasant environment of books, documents, and illustrative material, with instructors easily accessible, both in and out of lecture hours, department work is proceeding daily in History, Politics, and Economics. The history of political and social institutions, ancient and modern; the economic life of the Middle Ages and modern times; the theory and practice of government;

the history and theory of education, economics, finance, statistics, and the practical applications of economic principles are subjects on which both students and professors are engaged in widening the borders of knowledge.

Philosophy.

A course in the History of Philosophy, for graduate students, is given by Professor Griffin, in which Bacon's Novum Organum (Book I), Descartes's Method, Meditations, and Principles of Philosophy, Spinoza's Ethics, Leibnitz's Monadology, Locke's Essay on Human Understanding (Books I, II, IV), Berkeley's Principles of Human Knowledge, Hume's Treatise on Human Nature (Book I), Kant's Critique of Pure Reason and Critique of Practical Reason (in Watson's "Selections") are read and discussed.

The instruction in Philosophy offered at present is, however, mainly undergraduate, consisting of required courses in Logic, Psychology, and Ethics, which occupy five hours per week throughout the year.

(*a*) *Logic.* Attention is given to the theories of deduction and induction; to the forms of thought—notion, judgment, and reasoning; to the application of the rules of the syllogism, and the detection of the various kinds of fallacies; and to the methods of scientific investigation and proof.

The text-books used are Jevons's Elementary Lessons in Logic and Fowler's Elements of Inductive Logic, and references are given to the larger works of Jevons, and to the works of Mill, Bain, Venn, Keynes, and other recent writers. The work consists of frequent recitations and of short informal lectures, and written exercises are given out from time to time in the opposition and conversion of propositions, in the application of the rules of the syllogism, in the detection of fallacies, and in the elimination of contradictions from thought.

(*b*) *Psychology.* The instruction in Psychology is intended to give a general view of the results of the present methods of study, the recent investigations in regard to the quality and intensity of

sensations, the duration of psychic arts, etc.—in general, the subjects treated in the second part of Ladd's Physiological Psychology—being presented with sufficient detail to render them intelligible and interesting. A series of lectures and demonstrations on the anatomy and physiology of the nervous system—given in 1897–98 by Dr. L. F. Barker—is included in the course.

Especial emphasis is laid upon the facts of conscious experience as known through introspection, the most important end to be secured being, as it is believed, such an understanding of the facts and laws of mental life as shall fit one for wise self-government and effective influence. With this view, such powers and states of mind as attention, memory, association, habit, imagination, the feelings, the will, are discussed in as concrete and practical a way as possible. Baldwin's Elements of Psychology and Ladd's Outlines of Physiological Psychology are used as the basis of instruction, but these are largely supplemented by informal lectures, and by references to various authorities. An essay on an assigned subject is required from each member of the class.

(*c*) *Ethics.* The fundamental problems of Ethics, and the application of moral principles to the guidance of conduct and the formation of character, are considered with special reference to the Christian theory of morals. The great historic systems—hedonism, utilitarianism, intuitionism—and the relation to ethical theory of the doctrine of evolution, are discussed with the purpose of enabling the student to reach a just and intelligent view of the grounds and nature of moral obligation. The aim is to make the instruction of a directly practical nature, and to show the bearing of the problems considered upon questions of practical ethics.

The subject is taught by lectures, recitations from a text-book—Fowler's Principles of Morals, Part II, being used at present—and references to the works of the most important writers. One essay is required from each member of the class.

An outline of the History of Philosophy is given as a voluntary course.

MATHEMATICS.

The requirements of the government service having obliged Professor Newcomb to terminate his active duties in the University on the first of January, 1894, the instruction in Mathematics is carried on by Professor Craig, Dr. Chessin, Associate Professor of Mathematics and Mechanics, Dr. Hulburt, Collegiate Professor of Mathematics, and Dr. Cohen, Instructor in Mathematics, with such co-operation as may be secured, from time to time, from Professor Newcomb and other persons.

The more advanced courses in Mathematics vary from year to year, and are so arranged that a student who remains here two or three years may receive continued and systematic guidance in any of several directions. The less advanced subjects are nearly the same every year. Students properly qualified have open to them most or all of the following courses in any three consecutive years:

Under the general heads of Arithmetic, Algebra, and Geometry: Theory of Numbers, Theory of Substitutions, Theory of Invariants, Theory of Surfaces and Twisted Curves, Higher Plane Curves, and Synthetic Geometry. Courses are also given in Finite Differences and in the Theory of Probabilities.

Under the head of Analysis: Theory of Functions of One and More Complex Variables and Functions of Real Variables, Algebraic Differential Equations, Linear Differential Equations, Partial Differential Equations, Algebraic Integrals of One and Two Variables, Elliptic Functions, Abelian and Theta Functions, Automorphic Functions and their application to linear differential equations.

Under the head of Applied Mathematics: Rational Mechanics, Theoretical Dynamics, Celestial Mechanics, Kinematics, Theory of Attractions, and Theory of the Potential, the latter involving a full account of Neumann's, Schwarz's, and Poincaré's methods for Dirichlet's Problem.

Undergraduates are annually instructed in Elementary Analytic Geometry, Theory of Equations, Elements of Projective Geometry, Differential and Integral Calculus, Differential Equations, Solid Analytic Geometry.

Seminary work is carried on by Professor Craig. Short courses of lectures on special subjects other than those mentioned above are given from time to time during the year by Professor Craig and by others who may be invited to do so.

A large number of mathematical journals are regularly received, besides the publication of learned societies abroad and at home. Among the journals received are the following (the asterisk indicating full sets):

Journal für die reine und angewandte Mathematik* (Crelle); Journal de Mathématiques pures et appliquées* (Liouville); Comptes Rendus; Mathematische Annalen*; Monatshefte für Mathematik und Physik*; L'Intermédiaire des Mathématiciens*; Bulletin des Sciences mathématiques*; Journal de l'École Polytechnique; Annales de l'École Normale; American Journal of Mathematics*; Annali di Matematica*; Giornale di Matematica*; Acta Mathematica*; Archiv für Mathematik und Physik* (Grünert); Zeitschrift für Mathematik und Physik*; Proceedings of the London Mathematical Society*; Bulletin of the American Mathematical Society*; Bulletin de la Société mathématique de France*; Rendiconti del Circolo Matematico di Palermo*; Quarterly Journal of Mathematics*; Messenger of Mathematics; Annals of Mathematics*, etc.

The University has a collection of about two hundred and thirty geometrical models, illustrating the forms of mathematical solids, surfaces, and curves, their singularities and varieties, and the methods of descriptive geometry by which they are represented on a plane.

The American Journal of Mathematics, founded by Professor Sylvester, and edited in recent years by Professor Craig with the coöperation of Professor Newcomb, has completed its eighteenth volume. Volume XX is in progress. Beginning with Volume X, there has been published in each volume the portrait of an eminent mathematician. Those so far published, and in the order of publication, are as follows: Sylvester, Hermite, Poincaré, Cayley, Klein, Halphen, Lie, Picard, Appell, Fuchs, Darboux.

Astronomy.

The work of this department is conducted on plans outlined by Professor Simon Newcomb, who acts as general adviser. The instruction is given under the immediate direction of Dr. Charles

Lane Poor, Associate Professor of Astronomy, with the assistance of Dr. A. S. Chessin, Associate Professor of Mathematics and Mechanics.

The courses at present offered in Astronomy are designed for both graduate and undergraduate students, and they are so arranged as to meet the wants of all classes of students, from those just beginning the study to those already prepared to carry on advanced work. They include a study of the various branches of the science, illustrated and enforced by practical exercises, and by original work so far as the time at the disposal of the student will permit.

For training students in the use of instruments the University has erected, in connection with the Physical Laboratory, a small working observatory and supplied it with the following instruments:

An equatorial telescope of 9½ inches aperture, with clock-work and filar micrometer.
A direct grating-spectroscope, with 6 inch concave grating, 19 inches focal length.
A meridian circle of 3 inches aperture, with circles 2 feet in diameter reading to seconds.
A small meridian transit instrument.
A sidereal clock, chronographs, etc.
A reflecting circle by Pistor and Martins.
Several other small instruments, including an astronomical theodolite.

All students are required to make and reduce observations and to keep full records of the same.

The principal books and journals relating to Astronomy are arranged in a special library. They include the star catalogues, ephemerides, and tables for use in the observatory, a complete set of the Astronomische Nachrichten, the Astronomical Journal, Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, Annales de l'Observatoire de Paris (Memoires), Annals of the Harvard College Observatory, Greenwich Observations, Washington Astronomical and Meteorological Observations, and the various publications of observatories at home and abroad.

The following is a general view of the courses offered:

Graduate Work.

For those students who wish to take Astronomy as a subordinate subject, general outline courses are given each year. These courses are intended to familiarize the student with the most

important problems of spherical and practical astronomy, with the principles and general methods of gravitational astronomy, and with the history and literature of the subject. There are also given every year more advanced courses for those students who have already had some preliminary training. Among the subjects treated in these courses are the theories of precession and nutation, the computation and the correction of orbits, and the methods of computing special perturbations.

The advanced courses vary from year to year. Such courses embrace the method of least squares, the theory of measuring instruments, celestial mechanics generally, including the development of functions in trigonometric series, and the various methods of treating and integrating the equations of planetary motion.

Undergraduate Work.

A course in general astronomy is offered as an elective for third-year students. The course embraces an historical sketch of the development of the science and an outline of the present state of our knowledge of the constitution and motions of celestial bodies. The use of the principal instruments is explained, and some practice is had with the equatorial.

Physics.

The instruction in Physics is under the charge of Professor Rowland, Director of the Laboratory, with the aid of Dr. J. S. Ames, Associate Professor of Physics and Sub-Director of the Laboratory, Dr. Louis Duncan, Associate Professor of Electricity, Mr. H. S. Hering, Mr. H. G. Geer, Dr. W. J. A. Bliss, and several assistants.

The laboratory is a substantial brick building 117 feet long by 71 feet wide, with five stories besides a basement and a sub-basement, and is so situated as to receive light from all four sides. Power and heat are furnished from separate buildings. The sub-basement is divided into constant-temperature vaults, in which are kept the dividing-engines used in ruling gratings for optical purposes, and the comparators designed for accurately measuring

lengths. In the basement are the instrument and machine shops and the dynamo room. There are also four rooms designed for special investigations in electricity and magnetism and the battery room, which contains one hundred storage cells with a suitable switch-board and connections with all the working-rooms in the building. The main lecture-room with seats for one hundred persons is on the first floor and is two stories in height. On the same floor as the lecture-room are two rooms for heat experiments and four for work in electricity and magnetism. On the second floor are the director's study and library; the physical, mathematical, and astronomical seminary and journal-meeting room; four lecture-rooms; and two rooms for the storage of lecture apparatus. On the third floor are the elementary laboratories and the studies of various instructors. The fourth floor is specially arranged for investigations in light. There are spectrometer and photographing rooms, a balcony for heliostats, and other ample facilities for work in spectroscopy. On the fifth floor are rooms designed for special researches in light, and two large lofts. On the roof is a platform for open-air experiments; and the corner tower is surmounted by the dome of the astronomical observatory. A transit-house in the yard furnishes exact time.

A temporary power-house has been erected to facilitate the work in electrical engineering. It is a one-story building, 25 by 65 feet, located opposite the physical laboratory, on Garden street, and contains a 900-light Westinghouse alternating current dynamo with its complete equipment, a 500-light Fort Wayne continuous current dynamo, a two-phase plant for the transmission of power, other smaller dynamos and motors, a 50 horse-power Ball & Wood engine, and a 60 horse-power vertical boiler to drive these machines. The electric current from any of the machines can be conveyed to the physical laboratory to furnish light and power, or to be used for experimental purposes. A large number of other dynamos and motors are in the basement of the laboratory.

The physical apparatus includes an equipment for lectures and demonstrations and a valuable collection of instruments for elementary work and research. Many of these have been made from special designs, others are standard instruments which have been purchased from European and American makers; all of

them have been most carefully selected. Special facilities, in some cases almost unique, are afforded those wishing to carry on investigations in electricity and in light.

The physical and mathematical libraries of the University are now placed in McCoy Hall, where they are easily accessible at any time. The physical section contains complete sets of almost all the physical journals published in this country and abroad, and all the standard books of the present and the past. About sixty periodicals, English, French, German, and Italian, are received. Certain magazines and books of reference are, however, retained in the Seminary Room of the laboratory, where the advanced students can consult them at any moment. This small collection is specially selected each year with reference to the courses of advanced instruction offered that year. Among the magazines kept on file in the laboratory are the following:

Philosophical Magazine, Physical Review, The Astrophysical Journal, Wiedemann's Annalen and Beiblätter, Zeitschrift für Physikalische Chemie, Journal de Physique, Comptes Rendus, Proceedings and Transactions of the Royal Society of London, the Proceedings of the London Physical Society, L'Éclairage Electrique, and The Electrician (London).

Instruction and facilities for work in the laboratory are offered all classes of students, elementary and advanced. The following is a general view of the courses:

First Year (Minor) Course.—This is intended for students who are beginning Physics or who have not a sufficient knowledge of the principles of the subject to warrant their undertaking more advanced work. To enter this course a student must be able to use logarithms and must have studied plane trigonometry, at least as far as through the solution of right-angled triangles. The lectures are accompanied by demonstrations; and mechanics, sound, heat, electricity and magnetism, and light are taken up in succession. Recitations on the subjects treated in the lectures are held regularly, and the course continues, four hours weekly, through the year. Along with the lectures the student does regular work in the laboratory, three hours a week, performing simple quantitative experiments, which illustrate the facts and principles considered in the class-room. Written records of lectures and reports of laboratory exercises are required.

Second Year (Major) Course.—This is designed to meet the needs of students who have already taken either the first year's course, or its equivalent, and who wish to pursue further their physical studies. A working knowledge of analytic geometry and calculus is required for admission to this course. The lectures take up the mathematical side of physics largely, and are on the following subjects:

Mechanics, extending to some of the simpler problems in the dynamics of rigid and elastic bodies.
Thermodynamics.
Electricity and Magnetism.
Geometrical and Physical Optics, with special reference to diffraction phenomena.

Recitations are held regularly, and the course continues, four hours weekly, through the year. The laboratory work of this year occupies five hours a week, and includes problems that present greater difficulties, experimental or theoretical, than those of the first year. The student is allowed the choice of work in mechanics and electricity, or in heat and light. Written records and reports are also required in this course.

Advanced Work.—For the instruction of those students who have the necessary preparation, certain lectures are given in Mathematical Physics. There is one course, continuing through two years, which includes thermodynamics, heat conduction, physical optics, electricity and magnetism. As a preparation for this course, students are advised to take a preliminary course for one year, which treats briefly one or two subjects such as hydrodynamics, theory of elasticity, sound, mechanics, or theory of attractions. These lectures develop fully the mathematical theory of the subjects; and to follow them the student should have a satisfactory knowledge of differential equations and analytic geometry of three dimensions. Authors like Lord Kelvin, Lord Rayleigh, Maxwell, von Helmholtz, Poincaré are referred to continually, and the ability to read French and German is absolutely necessary.

The advanced students meet with the instructors once a week for the discussion of the current physical journals. Carefully prepared reports on various articles are here presented.

The Physical Seminary, to which only the most advanced students are admitted, meets one morning each week. The work of the seminary consists of two distinct exercises. One is the reading of some physical treatise and a consideration of the problems suggested by it; the other is the presentation of critical papers upon various assigned topics which are of special or historical importance.

The peculiar facilities for original research which are here afforded have caused special attention to be paid to advanced work, for the training both of investigators and of teachers; and all advanced students are expected to give as much of their time as possible to laboratory work. It is to this side of the subject that the Directors give their most immediate and careful attention; and not only are students able to watch important investigations as they are carried on, but, after a certain preliminary training, they themselves may aid in such work, or, under the guidance of the instructors, may undertake investigations which are designed to be of permanent value. As a preparation for this advanced work several months are spent by the students in performing experiments which familiarize them with the more important instruments used in research, with the precautions necessary to obtain the utmost accuracy in using instruments of precision, and with general experimental methods.

An effort is made to render the laboratory as useful as possible to advanced students and investigators. Those who are prepared for such work will have the facilities which it affords placed most freely at their disposal, and will receive all the assistance that the instructors can give.

Applied Electricity.

The work in Applied Electricity is intended to give the students such a knowledge of the subject as will fit them to understand and appreciate the latest discoveries in electrical science, and to apply these to the practical electrical problems of the day.

The course includes lectures, extending through two years, on theoretical and applied electricity, steam and hydraulic engineering, central station equipment, machine design, mechanics of engineering, and practice in mechanical drawing. An important

feature is laboratory work, to which much attention is paid, and original investigation is especially encouraged. The course is primarily intended for college graduates.

Students who have received the degree of Bachelor of Arts on completing the mathematical-physical group in this University are admitted without examination. Graduates of other colleges are not examined for admission, but they must satisfy the instructors that they are prepared to take the course.

Candidates for admission must have completed the major and minor courses of this University (or their equivalents elsewhere) in physics and mathematics, the minor course in chemistry, and the course in freehand and instrumental drawing; and must be able to read either French or German. Those who have not had all this preparatory training must follow the courses in which they are deficient; only one of these may be taken simultaneously with the regular work of the course.

Persons, not college graduates, who wish to complete their preparation for the work in Applied Electricity, may be admitted to the requisite undergraduate courses, on passing a special entrance examination covering the matriculation requirements in the following subjects: mathematics, French or German ("first division"), English, United States history, and the elements of one of the following branches of science—chemistry, botany, or physical geography. They will then follow for two years the preparatory courses in mathematics, physics, chemistry, and drawing, above referred to.

A certificate of proficiency is given to those students who complete the prescribed course in a satisfactory manner, and who possess a knowledge of *both* French and German.

The following is an outline of the course:

Electricity.—The instruction includes lectures on theoretical and applied electricity, with constant laboratory work. The lectures aim to give a clear working knowledge of the science, while in the laboratory the student receives what help and instruction he may need; yet, at the same time, he is taught to depend upon and think for himself, and is given every encouragement to undertake original work. In the first year the course includes lectures and examples on the physical and mathematical theory of electri-

city; in the second year, theory and design of dynamos and motors, transmission of energy, electric traction, telephones, telegraphs, alternating current apparatus, etc.

Electrical Measurements.—Accompanying the laboratory work during the first year, a course of lectures is given upon general methods of performing experiments and conducting tests, in which the fundamental measurements in electricity and magnetism and tests of generators and motors are considered.

Electrical Seminary.—Weekly meetings are held, at which students present carefully prepared papers upon special topics in connection with their studies or their laboratory work.

Steam and Hydraulic Engineering.—Steam boilers, steam engines, and turbines are considered, with especial reference to the requirements of central station work and in accordance with the best modern practice. Steam engine and boiler trials and tests of large stations, as well as the design of central stations for light or power, form important features of the course.

Machine Design.—The properties and strength of materials are considered in their relation to the forms and proportions of the structural details of prime movers and transmission machinery.

Mechanics of Engineering.—The statics of structures is treated by analytical and graphical methods, combined with the statics, dynamics, and kinematics of machinery, the mechanism of prime movers, and power transmission.

Mechanical Drawing.—Preparatory work in geometric constructions and descriptive geometry is followed by a course in technical drawing especially planned to meet the requirements of electrical engineering work. It consists during the first year of a preparatory course in precise drawing and in making finished drawings from machine sketches. This is followed by a course in practical machine design and the preparation of working drawings, tracings, and blue prints. The object in view is to familiarize the student with the conventional technicalities and enable him to obtain accuracy and facility in drawing and lettering.

During the second year the work embraces assembly drawings of machinery, boilers, dynamos, central stations, etc., prepared largely from the original designs of the students. This work is described in detail under the head of "Drawing" (see page 143).

Laboratory Work.—The students are expected to spend all their available time in laboratory work, and the minimum time allowed is nine hours per week.

During the first year, exercises are given in fundamental experiments: the measurement of electromotive force, current, resistance, self and mutual induction, capacity, permeability, comparison of resistance, testing cables, batteries, dynamos, motors, incandescent and arc lamps, etc. The work is largely individual, and the character and grade of the work given to the student is determined by his qualifications.

During the second year more advanced work is done; the students are given original problems to work out in the laboratory, and research work is engaged in. Tests and critical examinations of engines, boilers, and other prime movers and their accessories; experiments and investigations in direct and alternating current lighting and power plants are important features of this year's work.

Chemistry.

The instruction in Chemistry is under the charge of Professor Remsen, Director of the Laboratory, with the coöperation of Professor Morse, Sub-Director, Professor Renouf, First Assistant, Dr. Randall, Second Assistant, Dr. Gilpin, Dr. Jones, Dr. Reese, and other aids.

The higher or graduate work is based upon that given in the two years' undergraduate course, and those graduates of other colleges who have not followed courses equivalent to this, begin with that part of the undergraduate work which appears best suited to their needs. The following outline of the work will give some idea of its character:

Undergraduate work: First year.—From five to six hours each week through the year are given to laboratory practice. Three lectures are given each week by Professor Remsen or Professor

Renouf, and one review on the subjects treated in the lectures and on the laboratory work is conducted by Professor Renouf, Dr. Randall, and Dr. Gilpin. The ground covered by this course is approximately that laid down in "An Introduction to the Study of Chemistry" by Ira Remsen (Holt, New York), which is the text-book used.

Undergraduate work: Second year.—In this year the same amount of time is given to the laboratory as in the first year. The object in view is to give a more complete knowledge of the phenomena of chemistry than is given in the first year. The making of preparations of both inorganic and organic compounds plays an important part in the work. Further, the study of analytic reactions and of analysis is taken up as far as the time permits. Besides the laboratory practice, the course includes class-room work as follows: From October 1 until the Christmas recess four exercises a week in general inorganic chemistry, based largely upon the laboratory work, and conducted by Professor Renouf. As a book of reference to be used in connection with the laboratory work of this part of the course, and also for general study, Remsen's "Inorganic Chemistry: Advanced Course" (Holt, New York) is recommended. From January 1 until the end of the year the study of the chemistry of the compounds of carbon is taken up, the class-room work, which is based upon Remsen's "Introduction to the Study of the Compounds of Carbon" (Heath, Boston), occupying four hours a week, under the guidance of Professor Morse.

Graduate work.—The greater part of the work in the advanced courses is carried on in the laboratory. The subject of qualitative analysis is taken up thoroughly after a careful study of reactions as laid down in the "Introduction to Chemical Analysis" by Volhard and Zimmermann, while at the same time the study of general chemistry is continued. A prolonged course in quantitative analysis follows. The analytical work, which is under the supervision of Professor Morse, requires about a year. After this, an opportunity is given for the preparation of a variety of compounds involving methods of general importance, or illustrating important classes. A course in the methods of physical chemistry, such as the determination of molecular weights by observations on the boiling-points and freezing-points of solutions, measure-

ments of electrical conductivity, etc., is conducted by Dr. Jones. The course in the preparation of organic compounds is that laid down in Remsen's "Introduction to the Study of the Compounds of Carbon," supplemented by selections from Levy's "Anleitung zur Darstellung organischer Präparate," Fischer's book of the same title, and Gattermann's "Die Praxis des organischen Chemikers." This work is under the personal supervision of Professor Remsen. During the last year of his course the student undertakes an investigation, generally under the guidance of Professor Remsen, and, in case he is a candidate for the degree of Doctor of Philosophy, his thesis is based upon the results obtained in the investigation.

Special lectures are offered to advanced students, the topics varying from year to year. From the beginning of the current year until the middle of January Professor Remsen gave two lectures a week, and from that time until the end of the year four lectures a week, to graduate students on the Compounds of Carbon. Professor Morse gave one lecture a week throughout the year on Inorganic Chemistry. From October to Christmas Dr. Randall gave a course of about twenty lectures on Physical Chemistry. Throughout the year Dr. Jones gave a special course of lectures on Physical Chemistry twice a week. There was also a short course of lectures in the field of historical chemistry, in which the advanced students took part, each one working up an assigned topic, and presenting the results in the form of a lecture. Meetings were held weekly during the year to hear reports upon the more important articles in the journals of chemistry. Next year, 1897–98, Professor Remsen will lecture twice weekly during the first half-year on selected topics in advanced chemistry, for graduate students, and four or five times weekly during the second half-year on the chemistry of the Compounds of Carbon, for graduate students; Professor Morse will lecture once weekly on special topics in Inorganic Chemistry. Lectures on Physical Chemistry will also be given as last year. The historical course and the journal meetings will be continued.

While, in the courses outlined above, the books mentioned are used as the guides, the instruction is in no case confined to what is presented in the book. Students are constantly referred to the journals and other publications containing articles bearing upon

their work. Further, *the chief instruction in every course is that given in the laboratory.*

As regards the time required by a graduate student to complete the work for the degree of Doctor of Philosophy, it can only be said that one who has the necessary qualifications can generally do it in three years, after following such a course as that given to the undergraduates of this university who take the two years' course in chemistry. Those who have not had this preparation will generally require a longer time. There are no stereotyped courses leading to the higher degree, and it is impossible to say exactly what must be accomplished to attain it. What is desired is a certain maturity of mind with reference to the science of chemistry, and an ability to deal with chemical problems intelligently. This condition of mind is reached, if reached at all, by long-continued laboratory training accompanied by careful study of chemical journals and treatises. It may be said finally that the arrangements of the laboratory are made mainly with reference to those who wish to take up the study of chemistry in a broad way, and that those who want short courses in special branches of chemistry are not advised to come here. It is believed that whatever object the student may have in view, whether he intends to teach or to follow some branch of applied chemistry, the best preparation he can have is a thorough training in the pure science.

The American Chemical Journal, edited by Professor Remsen, is now in its twentieth volume.

Geology.

The instruction in Geology is under the direction of Professor Clark, assisted by Dr. Reid, Associate Professor of Geological Physics, Dr. Mathews, Associate in Mineralogy and Petrography, Mr. Fassig, Instructor in Climatology, and Dr. Shattuck, Instructor in Physiographic Geology.

An important course of lectures is given annually by Mr. Bailey Willis, of the U. S. Geological Survey, Lecturer upon Stratigraphic and Structural Geology.

The George Huntington Williams Memorial Lectureship in the Principles of Geology was inaugurated in April, 1897, by Sir Archibald Geikie, Director-General of the Geological Survey of Great Britain and Ireland. A second course of lectures, by a lecturer yet to be appointed, will be given during the session 1898–99.

The courses in geology, which are offered to both graduate and undergraduate students, consist of lectures, laboratory and field work, and conferences upon topics of current literature. Great importance is attached to laboratory training as a part of the geological course, and facilities are given for daily work from 9 a. m. to 5 p. m.

Commodious rooms have been fitted up recently in Hopkins Hall for the uses of the geological department, and contain the books, apparatus, and collections pertaining to geology.

Lecture Courses.—I. General Geology.—This course is planned to serve for the present as one of the regular undergraduate subjects, and at the same time to be introductory to all work in geology for graduate students, irrespective of the particular department in which they may choose their principal subject. The lectures embrace a general survey of the whole field of geology and are illustrated by rocks and fossils, by maps and sections, and by lantern views. Excursions are made on Saturdays, during the autumn and spring months, into the surrounding country, and two longer excursions, extending from Thursday to Saturday, are generally made in the spring. During the winter months an afternoon weekly is devoted, in the laboratory, to the exposition of specimens of rocks, fossils, and minerals.

II. Paleontology.—Attention is devoted to both the biological and geological relations of the important types of the animal and plant kingdoms. The phylogenetic history of the leading groups is traced out in detail, whenever suitable evidence exists. Laboratory work is arranged to accompany the course, care being taken to select typical material.

III. Historical Geology.—In this course the classification and distribution of the post-Archæan sedimentary rocks is considered. The use of fossils in the determination of horizons is fully explained,

and a detailed study made of the maps and literature of the different countries of the globe.

IV. Geological Physics.—In this course the geological phenomena which depend directly upon physical principles are treated theoretically and experimentally. The problems relating to the temperature, the rigidity, the age, and the magnetic condition of the earth, as well as those relating to volcanoes, earthquakes, geysers, glaciers, etc., are discussed.

V. Mineralogy.—This course consists of lectures upon crystallography, upon optical and general physical mineralogy, and upon the description of mineral species. Facilities are offered to those who wish to undertake crystal-measuring, as well as the practical determination of minerals.

VI. Petrography.—This course consists of the discussion of petrographical methods, of rock structures, and of physical properties of rock masses, followed by the special petrography of the igneous rocks, including the study of the various classifications, the macroscopical and microscopical features of rocks, together with a discussion of their origin, distribution, and literature.

VII. Stratigraphic and Structural Geology.—This course consists of a description of the processes which result in the formation and upheaval of sedimentary rocks. Erosion is discussed with special reference to conditions governing the character of detrital materials. Sedimentation is considered as a complex process of sorting, distribution, and deposition of the waste of land areas, and deformation is treated as the process which initiates erosion, and also, as applied to folding, as the indirect result of excessive deposition. The mechanics of rock folding and thrusting is illustrated both by actual sections of the Appalachians and by experimental results. The whole course leads to a discussion of the principles which should govern interpretation of the sedimentary record.

VIII. Principles of Geology. (The George Huntington Williams Memorial Lectureship.) This course was inaugurated by Sir Archibald Geikie in April, 1897.

Laboratory Work.—Laboratory courses are arranged to accompany the lectures, while advanced or special students are given

the opportunity to carry on fuller investigations upon either described or new materials.

The introductory laboratory work consists of an examination of materials designed to illustrate Course I, and includes typical fossils and minerals, together with maps, models, and sections of fully described areas.

Specially selected materials are also employed to illustrate the more advanced courses. Extensive collections for both the organic and inorganic work are owned by the University and include both determined and undetermined specimens.

For those who plan to carry on original investigations, large series of undescribed materials will be found accessible, while the immediate region affords exceptional opportunities for further collecting. Several such special pieces of work relating to the local area have been already published, while others are at the present time in process of preparation in the laboratory.

Field Work.—The area of the state of Maryland includes, notwithstanding its comparatively small size, a remarkably perfect sequence of all the geological formations. The most ancient rocks which make up the earth's crust, as well as those still in the process of deposition, are here found, while between these wide limits there is hardly an important geological epoch which is not represented. As a result, most excellent facilities are afforded for a study of the various geological horizons. During the autumn and spring, excursions are made upon Saturdays into the surrounding country, the crystalline areas and the various Cretaceous and Tertiary formations being readily accessible. More extensive excursions are made from time to time into the early Mesozoic and Palæozoic areas of the western portion of the State and into the highly fossiliferous Tertiary region of the lower Chesapeake Bay.

After the student has become familiar with the various regions under the guidance of the instructors, he is encouraged to take up the study of some specified area, where, according to his inclination, he may carry on investigations upon the older crystalline rocks or the later fossiliferous strata. Several theses of this nature have been already presented for the degree of Doctor of Philosophy.

Conferences and Student Lectures.—In order that the advanced students may be kept in touch with the most recent investigations in the science, conferences are held, at which the leading journals in geology are reviewed by the students under the direction of the instructors. The conferences take place bi-weekly. The leading articles are given with some fulness, outline maps and sections being prepared in a manner suitable to illustrate the abstracts of the papers presented. At these conferences considerable attention is given to the foreign journals, particularly those in German and French.

In order that the advanced students may have the experience necessary for the successful preparation and delivery of class-room lectures, a course upon some phase of geology is arranged for, a special topic being assigned to each student. The lectures of this course take place bi-weekly, alternating with the conferences.

Geological Laboratory.—The Geological Laboratory is situated in Hopkins Hall, and comprises about thirty rooms, large and small, upon the second and third floors, where the student may carry on his work from 9 a. m. to 5 p. m.

The main room upon the third floor, now called the Williams Room contains the collections and library of the late Professor George Huntington Williams. A room upon the same floor contains the books and collections of the late Professor H. Carvill Lewis, and is known as the Lewis Room.

In accordance with the custom of the University, the books relating to the work of a particular department are given into its charge, the books for general reference being retained in the University library. The library of this department contains a good representation of the leading journals and works of reference upon geological subjects. It is greatly enriched by the Williams and Lewis libraries. Extensive series of topographical and geological maps likewise form a portion of the library, and these are constantly increasing in number.

Collections and Apparatus.—The collections of the department consist primarily of a large amount of important material brought together from Maryland and adjacent States by the late Professor Williams and those associated with him. It represents all the

horizons of this State, being especially rich in crystalline rocks and in Cretaceous and Tertiary fossils. Some of this material has been already described, while much awaits further study.

In the Williams Room are placed the collections of Professor Williams, consisting of extensive suites of specimens and thin sections of minerals and rocks selected from the best known and most thoroughly studied localities in both Europe and America.

Other important collections are the following:

The Lewis Collection of rocks and thin sections, numbering over 1000 specimens, deposited with the University by Mrs. Lewis. These specimens were collected by the late Professor H. Carvill Lewis and represent carefully selected material, especially from Pennsylvania, Germany, Switzerland, and South Africa.

The Krantz Collection of fossils contains several thousand specimens from the best known localities in Europe, being representative of all the different horizons.

The Hill Collection contains a large number of specimens of rocks and characteristic fossils, from the Cretaceous formations of Texas, collected by Professor R. T. Hill, of the U. S. Geological Survey. Most of Professor Hill's types are in the collection.

The Stürtz Collection, a suite of over 400 hand specimens and accompanying thin sections. These represent the rocks cited by Professor Rosenbusch in his *Mikroskopische Physiographie* and are from the type localities.

The Lehmann Collection, a suite of specimens and thin sections gathered by Professor J. Lehmann and sent by him to the University to illustrate his well-known work on the Crystalline Schists.

The Allen Collection of Minerals, which is especially rich in early discoveries from American localities, includes many of the type specimens illustrating the works of the late Professor O. D. Allen.

There are also the private collections made by Professor Clark in Europe, and numerous smaller collections obtained by gift or exchange, representing the geology of many portions of the globe.

The apparatus includes a series of beautiful models of the continents, placed in the custody of the University by E. H. Butler

& Co., Publishers, of Philadelphia; a large model of the State of Maryland, on the scale of 1½ miles to the inch, in the custody of the State Geological Survey; a model of Baltimore and vicinity, on the scale of 4 inches to a mile, without vertical exaggeration; the Shaler and Davis models, together with a large number of photographs and lantern slides. There are also several goniometers, a dissolving stereopticon, over a dozen microscopes of late design, an electrical machine for preparing rock-sections, a complete suite of wooden and glass crystal models, together with other important pieces of apparatus for special work.

State Organizations.—The headquarters of the Maryland Geological Survey and Maryland State Weather Service are at the University, Professor Clark being both State Geologist and Director of the Weather Service. Special facilities are afforded advanced students, on this account, to carry on work in connection with these bureaus during vacation time.

Geological Publications relating to the Baltimore Region.—The following publications relating to the local environment can be obtained from the Johns Hopkins Press:

Topographical Map of Baltimore and vicinity, price $1.00.

Geological Map of Baltimore and vicinity, price $1.00.

Reports, Maryland Geological Survey. Volume I.

Climatology and Physical Features of Maryland (including Geology), being the First Biennial Report of the Maryland State Weather Service, free.

Many smaller contributions upon the geology of the Baltimore area have appeared in the Johns Hopkins University Circulars.

Other important papers have been published by the U. S. Geological Survey and in the various scientific journals.

Biology.

Instruction for both graduate and undergraduate students is given in the Biological Laboratory, a four-story building of eighty by fifty-four feet, opened in 1884, with large rooms for general and undergraduate work, separate work-rooms for students engaged in research, a small museum, and an herbarium. It is well equipped with apparatus and other facilities for training in the methods of experimental physiology and zoölogy, and for special investigations in these subjects. It contains a library with a very complete set of standard works, special treatises, reprints, dissertations, and the important physiological, zoölogical, and botanical journals.

Advanced Work.

Opportunities are given for advanced work in zoölogy and animal physiology. A detailed account of the courses for each year may be found in the University Circulars and announcements.

The work in Zoölogy is directed by Dr. W. K. Brooks, Professor of Zoölogy, assisted by Dr. E. A. Andrews, Associate Professor of Biology, and by laboratory assistants.

The studies which are carried on in the laboratory are supplemented by work at the Marine Station, which is established, from time to time, at suitable points upon the seashore; by special lectures; by weekly meetings of the zoölogical journal club for the discussion of current literature; and by the work of the zoölogical seminary, which meets three times a week.

The Baltimore Naturalists' Field Club holds monthly meetings in the Biological Laboratory, and weekly excursions, to which all members of the University are invited, during the favorable season of the year.

One of the ordinary fellowships in the University is usually awarded, each year, to a graduate student in zoölogy, and, in the selection of the Bruce Fellow, preference is given to those who have held ordinary fellowships in zoölogy.

One of the graduate students in zoölogy may be appointed each year to occupy, during the summer months, the university table at the laboratory of the United States Fish Commission at Wood's Holl.

Whenever researches or parts of researches which have been carried on in the laboratory are completed and ready for publication, the University Circulars provide for the prompt publication of abstracts of the results.

Students looking forward to the degree of Doctor of Philosophy may offer zoölogy as a principal or as a subsidiary subject, but if they have not already pursued studies equivalent to the undergraduate courses in this laboratory, they will be required to take these courses. Those who make zoölogy their principal subject, may select, as subordinates, any two of these subjects, viz., anatomy, animal physiology, botany, chemistry, geology, physics, or any other approved combination.

The work in Physiology is directed by Professor W. H. Howell, assisted by Dr. G. P. Dreyer. A course of lectures covering the general and special physiology of the animal body is given each year and is illustrated by a large number of class demonstrations. In connection with this series of lectures, a laboratory course in experimental physiology is offered extending over a period of twelve weeks and giving the student an introduction to the methods of laboratory technique. The general course of lectures is supplemented by advanced lectures given from time to time upon selected topics; by the work of the physiological seminary, which meets at stated intervals for the special study of certain parts of physiology; and by a weekly journal club intended for the presentation and discussion of the material contained in the current periodicals.

In addition to the physiological literature contained in the library belonging to the laboratory, publications upon physiology and the related scientific branches of medicine may be obtained conveniently from the libraries of the Medical School, the Medical and Chirurgical Faculty of Maryland, and the Surgeon General's office in Washington.

Students looking forward to the degree of Doctor of Philosophy may offer Animal Physiology as a principal or as a subordinate subject. Those who take physiology as a principal subject must present evidence of previous training in physics equivalent to the minor undergraduate course in this University, in chemistry equivalent to the minor and major undergraduate courses, and in biology equivalent to the minor and major undergraduate courses.

The laboratory is open also to special students, graduates in medicine and others, who may wish to undertake laboratory investigations, or who desire to become acquainted with the use of physiological apparatus and the methods of demonstration and research.

The work in Botany, which has been conducted, under the direction of Professor Brooks, by Dr. J. E. Humphrey, has been interrupted by the death of Dr. Humphrey, who lost his life in the prosecution of field work in botany in the summer of 1897. Students of botany have access to the extensive herbarium of Capt. John Donnell Smith, to the Schimper herbarium, to the Fitzgerald collection of Mosses, to Dr. Humphrey's collections of Cryptogams, and to the local herbarium of the Field Club.

The various scientific libraries of the city, including the valuable library of Captain Smith, contain most of the important botanical literature.

Botany may be taken as a subordinate subject for the degree of Doctor of Philosophy.

Undergraduate Instruction.

The aim of the college courses in biology is to train the powers of observation and reasoning, while the facts gained are such as may with advantage belong to every well-informed mind and may also form the basis for subsequent specialization.

The work of the first year (*Minor Biology*) is designed as part of the general education of every college student and is open to all candidates for the A. B. degree, as well as to special students. It is regarded as essential to all students intending to take up the study of medicine or to follow any line of applied biology, and it (or an equivalent) is required for entrance to the Medical School. This course may be taken without previous courses in physics and chemistry, but preparatory training of this character is strongly recommended. It is chiefly a laboratory course of two afternoons a week throughout the year, supplemented by four hours a week of lectures, recitations, and exercises designed to emphasize the more essential truths of biology. In the laboratory, each student studies with the microscope or dissects selected plants and animals from the simpler, such as amoeba and yeast, to the complex, such

as the fern, the frog, the flowering plant, and the rat; he studies directly the human skeleton and compares it with the skeletons of animals; and in the Spring he studies the life history of the frog and the formation of the chick in the hen's egg.

In April and May the study of the external morphology and classification of the flowering plants is taken up under the instruction of Dr. B. W. Barton.

The work of the second year (*Major Biology*) is intended for those who have some special interest in biology. It is divided into three parts, designed to give the student an acquaintance with the methods and principles of the scientific study of zoölogy, histology, and embryology. The time required is the same as in the minor course.

There is also a short course in zoölogy offered as a two-hour elective for students in other departments, and all students in the University are invited to join the excursions of the Naturalists' Field Club.

Pathology.

The Pathological Laboratory is a building of four stories on the grounds of the Johns Hopkins Hospital, with which it is connected. The autopsy theatre is in this building, which includes also rooms for pathological histology, bacteriology, experimental pathology, and private work. The museum contains a useful collection of morbid specimens.

The library of the Johns Hopkins Hospital, close to the laboratory, contains a large number of books of reference and receives regularly the chief medical and pathological journals.

Facilities are afforded for elementary and advanced study in general and special pathological anatomy, general pathology, and bacteriology. The instruction in pathology is given by Professor Welch, Associate Professor Flexner, and Drs. Livingood and Harris.

The instruction in pathology for matriculates in the Medical School continues throughout the second year of the regular medical course. It includes general pathology, gross morbid anatomy,

pathological histology, and the technique of post-mortem examinations. The laboratory work occupies three half-days a week.

A course in pathological histology for physicians is given during the months of May and June. This course presupposes on the part of the student a knowledge of normal histology. In connection with the course, demonstrations of fresh pathological specimens are made and opportunity is afforded to become familiar with the method of making post-mortem examinations. After the study of inflammation, the pathological histology of the different tissues and organs of the body is taken up in regular order. Microscopical sections are given to be stained, mounted, and carefully studied and drawn. The student is encouraged to do as much independent work as his time will permit.

The instruction in bacteriology is given by Professor Welch and assistants. In addition to the course for matriculates in the medical department, courses in this subject are given to physicians in May and June. Students are taught the preparation of culture-media, the principles of disinfection and sterilization, methods of cultivating, staining, and studying bacteria, particularly those of a pathogenic nature, and the biological examination of the air, water, and soil. This department is fully supplied with the requisite apparatus and cultures for bacteriological work.

In addition to the regular courses for medical students and physicians, opportunity is afforded for advanced work and special research in pathology and bacteriology. For these purposes the Pathological Laboratory is well equipped with the necessary apparatus and material. Special subjects for research will be assigned to those who wish and are prepared to undertake original investigation.

Instruction in Clinical Microscopy is given to physicians, during May and June, in the Clinical Laboratory.

The Pathological Laboratory being upon the same grounds with the Johns Hopkins Hospital and Dispensary, the opportunities are convenient and readily accessible for combining clinical studies with the work in pathology.

Three associations, the Hospital Medical Society, the Historical Club, and the Journal Club, meet in the Assembly Room of the Hospital, one each Monday evening. The libraries of the Uni-

versity and the Hospital are supplied with a large collection of medical books and periodicals, which are accessible to the student.

The Johns Hopkins Hospital Bulletin, issued monthly, and the Johns Hopkins Hospital Reports contain the proceedings of the Hospital societies, articles by the medical staff, and the results of researches conducted in the Hospital and the medical laboratories.

The Journal of Experimental Medicine, now in its third volume, under the editorial direction of Professor Welch, also contains reports of researches carried on in the physiological and pathological laboratories here and elsewhere.

Drawing.

The instruction in Drawing is arranged to give the student a general knowledge of the subject, as far as the time at his command will permit, while those who show particular aptitude are encouraged to follow special courses. The instruction is given by Mr. S. E. Whiteman and Mr. H. G. Geer.

Undergraduates take up the subject as one of their required studies, unless they can show a fair degree of proficiency attained elsewhere. Graduate and special students are allowed the privilege of receiving such instruction as may be most helpful to them in their respective fields of work. Those who look forward to scientific pursuits, especially those who study natural history, physics, applied mathematics and mechanics, and electrical engineering, find these courses of great value.

The subject, therefore, divides itself into three distinct lines of work to meet the particular requirements of the different classes of students: (1) the course for undergraduates; (2) the courses of special instruction for graduate and other students; (3) the technical course for students of applied electricity.

The Undergraduate Course is designed to form part of the general education of the student. It aims to impart such knowledge of the principles of drawing, with extended practice in the application of the same, as shall best serve to educate the eye and to train the hand,—the one to see correctly and the other to express accurately the appearance of forms. The course includes

freehand and mechanical drawing. Special students in subjects preliminary to the course in applied electricity are required to take all this work; other students may have the option of freehand drawing alone throughout the year, and drawings made in the course in systematic botany may be accepted as an equivalent for the work of the last twelve weeks of the course in freehand drawing. In the freehand drawing, the student is at once set to draw from models, beginning with elementary forms, and proceeding through a series of exercises till he is able to produce a fair drawing of any simple object or group of objects, in outline and in light and shade. The chief instruments used are charcoal and crayon. The use of drawing instruments is taught, and the constructive processes are applied which are in general use in instrumental drawing. The elements of descriptive geometry are afterwards taken up in this course, and the fundamental principles of orthographic, scenographic, and isometric projections are worked out and applied in carefully executed drawings, finished in ink. Precision and fidelity are insisted on and no careless work is allowed, nor is any copying permitted. Each student receives the personal attention and guidance of the instructor. With the exactness of pen-and-ink work on the one hand and the freedom of charcoal on the other, the student attains a power of graphic expression which will be of service to him in almost any pursuit.

The Special Instruction in drawing is necessarily of such a nature as is best adapted to the requirements of the individual student: freehand drawing from natural forms, in charcoal and in water color; from plaster casts, in charcoal and crayon; advanced work in descriptive geometry. This special instruction includes a course for students of Biology, with a view to illustrating the work of that course.

The Technical Course in mechanical drawing is especially planned to meet the requirements of the students of applied electricity. It consists of a carefully systematized series of exercises and problems designed to familiarize the student with the best modern methods of the draughting room, and the acquisition of such skill in rapidly and accurately executing designs and drawings accordingly, as the time and the aptitude of the student permit.

This course extends over a period of two years. During the earlier months the time is occupied with a set of drawings to develop precision of measurement and acquaint the student with the standard conventionalities of the draughting room. Special instruction in the use of the various drawing instruments and appliances and their care is given during this time. Line drawing, tracing, and blue-printing, the conventional colors, geometrical construction, projections, machine sketching and other important details of the draughtsman's work are then practised until the student has acquired proficiency. The advanced instruction, beginning with the middle of the first year, consists of the solution of problems in the kinematics of machinery on the drawing board, embracing many of the fundamental forms, and the constructions of linkage, cams, gear-trains, tooth outlines, etc., together with the tracing of the motions of detail mechanism and the kinematic relations of connected parts. This work is followed by the design of the details of special pieces of machinery, in whole or in part, to fulfill given conditions. The dimensions, detail drawings, tracings, and blue-prints are the result of the student's computations in the light of good current practice. This part of the work is accompanied by lecture-room instruction and the study of the text-book. The concluding portion of the course embraces a similar method of teaching, the lecture-room and drawing-room work being so correlated that the student is continually in contact with his major subject. The course concludes with the designing of complete electric machines, dynamos, motors, or some important special type of machine. Students often make original designs, and not infrequently work out the details of their own inventions.

The instruction is of a personal nature, and the individual needs of each student are carefully watched, and special aid is given where required.

Physical Culture.

Systematic exercise is required of all undergraduates. With graduate students it is optional. A careful examination of each undergraduate is made by the Instructor in Physical Culture, and such exercises are prescribed as are most suitable to his needs.

The Gymnasium is a new building, 127 feet long by 35 feet wide, and is provided with convenient lockers, baths, etc., as well as with the newest forms of apparatus. Adjoining the gymnasium proper is a "Cage,"—an enclosed and covered space for practice in running and in athletic sports,—127 feet long, 66 feet wide, and 30 feet high.

In addition to the training given by the Instructor in Physical Culture and his assistants, instruction is provided, without extra charge, in fencing, wrestling, and boxing.

THE DEGREE OF DOCTOR OF PHILOSOPHY.

REGULATIONS.

[Adopted by the Board of University Studies, February 26, 1898.]

The degree of Doctor of Philosophy is offered to students who have followed advanced courses of university study for a period of not less than three years, under suitable guidance and favorable conditions, and who have submitted an acceptable dissertation and passed the prescribed examinations.

In order to be accepted by the Board of University Studies as a candidate for the Degree of Doctor of Philosophy, the student must give evidence that he has completed such a liberal undergraduate course of academic study antecedent to the baccalaureate degree as is offered by colleges of good standing.

He must then follow advanced studies in the departments of knowledge which he may have chosen, and these studies must be pursued without serious distractions, under qualified teachers, for a period of at least three years. Private study, or study pursued at a distance from libraries and laboratories and other facilities, will not be considered as equivalent to university study.

The Board reserves the right to decide in each case whether the antecedent training has been satisfactory, and, if any of the years of advanced work have been passed by the candidate away from this university, whether they may be rightly regarded as spent in university studies under suitable guidance and favorable conditions.

In order that students may receive the definite counsel of the proper authorities with respect to their future course, they are advised to offer themselves as "candidates" for this degree as soon as their purposes are formed. At least one academic year must be passed in this university, and in every case the year immediately preceding the final examinations.[1]

[1] In case a student has complied with all the conditions and has practically completed his preparation for the final examinations, and is prevented by good reason from presenting himself, he should ask the Board to appoint a later day for his examination.

Correspondence on the foregoing matters should be addressed to the Registrar of the University.

Requirements for the Degree.

Every candidate for the degree of Doctor of Philosophy must select one principal and two subordinate subjects, the combination to be approved by the Board of University Studies. These must be pursued without serious distraction and under the general direction of the Professor in the principal subject of study, who is the official adviser of the candidate. The student must prepare a satisfactory dissertation, and must pass with credit certain written and oral examinations in his chosen departments of study.

Acceptance of the Candidate.

A student wishing to be considered a candidate for the degree must make formal application to the Board of University Studies to be enrolled, and must be accepted by the Board at least an academic year[1] in advance of the time he expects to present himself for examination in his principal subject. A blank form is provided for the purpose. After filling out this form, the student must present himself before the examiners in French and German at one of the stated examinations in these subjects. When their certificates are affixed to his application, he is to obtain the signatures of approval of the Professors in the departments concerned. The application, thus completed, is then to be presented to the Board for its final action.

Requirements in French and German.

a. The candidate must be able to translate French and German at sight. Familiarity with journals and monographs pertaining to his principal department of study will satisfy this requirement.

b. Examinations are held in these languages at the middle and end of each academic year, at one of which times the candidate must present himself. In October is provided a special examination for students who were not connected with the University during the previous academic year.

[1] The acceptance of a candidate by the Board at its October meeting is regarded as an acceptance at the beginning of an academic year.

c. Students who have not acquired a reading knowledge of these languages before engaging in graduate study are advised to pursue a course organized for that purpose, during their first year. Absolving the class examination at the end of this course will be construed as satisfying this requirement for the degree of Doctor of Philosophy.

Requirements in the Subordinate Subjects.

The subordinate subjects are of two grades and are known respectively as the first subordinate and the second subordinate. Each of these subjects shall be followed by the candidate for a portion of his time, during at least one year of graduate study.

It is impossible to define with precision the amount of time to be devoted to the subordinate subjects. In general, however, it may be stated that the two subordinate subjects, taken together, should represent one year's work, two-thirds of this time being devoted to the first subordinate subject.

Dissertation.

a. The dissertation must be written upon a theme approved by the adviser of the candidate, and must be completed and submitted to the Board at least four weeks before the written examinations in the principal subject are held, unless the adviser recommends a later date. The dissertation must be either printed or legibly written, paged, and bound according to a prescribed form, which can be seen in the library: this copy to be placed on file and to become the property of the University.

b. The Board shall designate two or more referees, who shall present a written report on the dissertation,—said report to be filed. In the intervals between the sessions of the Board, the President shall have power to appoint the referees.

c. The candidate shall print the dissertation in full or in part, —if in part, to the extent of not less than twenty-four octavo pages,—under the supervision of his adviser, within one year of the time when the degree is conferred, and shall present one hundred and fifty copies of the work to the University. A biographical sketch of the author shall be appended to the dissertation in both its manuscript and its printed form.

d. If the dissertation has not already been printed, a deposit of $50, to insure its printing within the specified period, shall be made by the candidate at the treasurer's office before the degree is conferred. This deposit shall be returned to him when the printed copies are presented to the University.

e. If the printed copies be not presented to the University within the specified time, the Board may declare the deposit forfeited, and may apply the amount in printing such portions as the adviser deem proper.

Examinations.

a. The candidate shall be given written examinations in the principal subject and, wherever practicable, in both subordinate subjects, and an oral examination, before the Board, in the principal and in the first subordinate subject.

b. The candidate shall be permitted to take the written examinations in both the first and second subordinates at the end of the respective years in which the courses in these subjects were completed, or whenever he is ready, at the discretion of the examiner.

c. The Professors in the several departments of study shall prepare written reports on the result of the examinations. These reports together with the questions and answers shall be laid before the Board at the oral examination and the reports filed.

d. In the written examinations no one session shall exceed five hours.

e. In the oral examinations before the Board, the time allotted to each examination shall be one hour, and three-quarters of this time shall be devoted to the principal subject.

Degree.

The names of the candidates found worthy of the degree will be submitted to the Board of Trustees, and with their approbation the degree will be publicly conferred.

COLLEGIATE INSTRUCTION.

In addition to the instruction provided for graduate students, the Johns Hopkins University makes ample provision for collegiate instruction. Its work was originally organized to meet the needs of those desiring a systematic discipline in liberal studies, as well as to furnish additional opportunities to persons who had already received a college training. The courses offered to undergraduates are maintained with no less care and thoroughness than those intended for advanced students; the oldest and most experienced members of the academic staff coöperate in the conduct of them. No small part of the influence and usefulness of the University is in connection with the collegiate classes, in which, since 1876, nearly thirteen hundred students have been enrolled.

Certain features of organization and administration have contributed to the effectiveness of the undergraduate work. The scrupulous observance of the distinction between the disciplinary methods appropriate to college teaching and the freer methods of advanced instruction; the "group" arrangement of studies, combining a reasonable liberty of choice with a sufficient exercise of authority; the facilities afforded young men of superior capacity for carrying their studies beyond the requirements of graduation; the influence upon younger pupils of the presence of a large body of graduate scholars conducting investigations in all the great departments of learning:—these conditions have proved favorable to the development of earnestness and scholarly devotion.

ARRANGEMENT OF COURSES.

The courses of study open to undergraduates are arranged in (a) the curriculum prescribed for candidates for matriculation; (b) the several "groups" offered to matriculated students.

(a). Curriculum prescribed for Candidates for Matriculation.

The standard of matriculation maintained at the Johns Hopkins University is considerably higher than that required elsewhere. In the Baltimore City College, in several private schools of Baltimore, and at the Washington High School, young men may be prepared to pass the matriculation examination; but many are unable to secure, in the places where they reside, instruction which will fit them to meet the requirements here exacted. As a consequence, many students who have desired to enter the University have been unable to do so, and some who have entered have done so only under the embarrassment and vexation of "conditions." In order to meet this difficulty, terms of admission are now designated (see page 172), corresponding to the terms of admission to other colleges of established reputation, and students who satisfy these requirements are admitted to a prescribed course of study adapted to prepare them, at the end of a year, for full matriculation.

The course of study prescribed for these students is as follows:—

1. Mathematics. *Four hours weekly.*
   Algebra (special topics).
   Solid Geometry.
   Plane Trigonometry.
   Analytic Geometry (straight line and loci).
2. Latin. *Three hours weekly.*
   Cicero (selected letters).
   Sallust, *Catiline.*
   Ovid, *Heroides.*
   Vergil, *Georgics* (selections).
   Sight Reading and Prose Composition.

3. GREEK. *Three hours weekly.*
   Homer, *Iliad*, book vi.
   Herodotus, book vii.
   Sight Reading and Prose Composition.

4. GERMAN OR FRENCH.
   (*a*) For students offering Greek. *Three hours weekly.*
   German: Thomas's *Practical German Grammar;* Super's *Elementary German Reader;* Meissner's *German Conversation;* E. S. Buchheim's *Short German Plays* (Clarendon Press).
   French: Grandgent's *Short Grammar*, and *Exercises* based on Super's *French Reader;* Super's *French Reader;* Hugo, *La Chute;* De Vigny, *Le Cachet Rouge.*

After completing one of these courses, students are required to take Minor A in their groups.

(*b*) For students not offering Greek. *Four hours weekly.* The minor course, Class A.

5. RHETORIC AND ENGLISH COMPOSITION. *Three hours weekly.*
   Principles of Rhetoric.
   Rhetorical Analysis.
   Practice in Writing.

Students taking Greek may defer this course until after matriculation.

6. FREEHAND AND MECHANICAL DRAWING.

(b). GROUPS OFFERED TO MATRICULATED STUDENTS.

After matriculation, the student is expected to follow one of several distinct and parallel courses of instruction known as "groups." These are seven in number, each comprising (1) studies common to all the groups and required of all undergraduates, (2) studies peculiar to a group, (3) optional studies. The groups are assumed to be equally honorable and difficult, and are intended to combine liberty of election on the part of the student with sufficient exercise of authority to prevent discursive and ill-considered work. Each group contains two principal studies, both of which extend through two years of instruction. These are: (1) Latin and Greek, (2) Mathematics and Physics, (3) Chemistry and Biology, (4) Physics and Chemistry, (5) Latin and Mathematics, (6) History and Political Science, (7) English, with German or French.

The student may follow strictly the group which he has chosen; or, under the regulations hereafter stated (see page 164, section *b*),

he may substitute, with the approval of his adviser, other studies for two—in certain cases, for three—of the courses laid down in his group.

Students who have passed French or German as the principal subject in place of Greek for matriculation, are required to substitute for it some other subject, or to take an advanced course in one of these languages. Any undergraduate course approved by the adviser may be chosen for this purpose.

In these ways the course of study in the several groups may be modified; while those who wish to concentrate their attention in the more thorough study of a special field, will find it advantageous to accept the groups as they stand.

The optional courses in Science and Literature vary from year to year, and may be followed by the student according to his tastes and acquisitions. The arrangements of the University allow those who have capacity for more than is prescribed, to broaden their studies by attendance upon the public lectures from time to time provided; and, if time permits, they may also take longer or shorter courses not actually required of them.

Each group contains twelve courses. Eight of these are four-hour courses,—each representing four hours of class-work weekly for a year. Of the others, two—the course in Rhetoric and that in English Literature—are three-hour courses; one is an elective of two hours in the third year; and one—the course in Philosophy—occupies five hours weekly through one year. Rhetoric, English Literature, and Philosophy form a part of each group. A course in Economics and History is also included in each group. Each group contains at least one year of French and one year of German, and at least one year of attention to a scientific subject, including the performance of the work prescribed in the laboratory. The instruction in Drawing and in Vocal and Physical Culture is additional to these twelve courses.

1. *The Classical Group.*

The Classical group corresponds in the main to what has been the ordinary course of study in our colleges, the requisite mathematics having been secured before matriculation. The emphasis is laid upon Latin and Greek, each of which is studied two

years. Rhetoric, English Literature, French, German, one subject involving a year of laboratory work, Economics and History, Comparative Philology, Philosophy, and an elective subject occupying two hours weekly in the third year, are also included, together with Drawing and Vocal and Physical Culture.

2. *The Mathematical-Physical Group.*

The Mathematical Physical group substitutes two years of Mathematics and two years of Physics for Latin and Greek, adding also a year of Chemistry, the other studies being the same as in the classical group. This course affords a good basis for the subsequent study of Electricity, Engineering, Astronomy, and other subjects largely dependent on the science of Mathematics.

3. *The Chemical-Biological or Preliminary Medical Group.*

The Chemical-Biological group fits the student to enter at once upon the studies of the Johns Hopkins Medical School, and is also a good preparation for the study of medicine elsewhere, or for the professional study of Natural History. It provides instruction in Physics, Chemistry, and Biology, with laboratory practice. The requirements in French, German, English, History, and Philosophy are the same as in the other groups.

4. *The Geological-Biological Group.*

The Geological-Biological group furnishes a good fundamental training in the sciences, providing a year's course each in Biology, Physics, and Chemistry, and a two-years' course in Geology. It affords a broad education in scientific studies, and prepares the student both to appreciate scientific methods, and to pursue advanced courses in Geology, later, should he so desire.

5. *The Latin-Mathematical Group.*

The Latin-Mathematical group affords a good fundamental training, without the study of Greek. It differs from the classical group only in substituting Mathematics for Greek.

6. *The Historical-Political Group.*

The Historical-Political group furnishes a basis for the subsequent study of law. It omits Greek and retains but one year of Latin, providing two years of History and two years of Economic and Political Science.

7. *The Modern Language Group.*

The Modern Language group is designed for those who wish a literary training based upon the modern rather than upon the ancient languages. It substitutes for Greek two years of English, and, retaining one year of Latin, substitutes for the other an additional year of either French or German. If the student is already proficient in French or German, he may substitute a year of Spanish or Italian for one of these languages.

Detailed statements respecting the groups are given in the succeeding pages.

First Group. (*Classical*).

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Suetonius, *Augustus.*
Horace, *Ars Poetica.*
Vergil, *Æneid* (books ix, xii).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GREEK.

CLASS WORK. (1 p. m.) *Four hours weekly.*

Xenophon, *Oeconomicus.*
Lysias, *Epitaphius.*
Euripides (one play).
Prose Composition.

PRIVATE READING:

Plato, *Apology.*
Homer, *Odyssey* (books i, ix, x).

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a. m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a. m.) *Four hours weekly.*

Juvenal.
Pliny.
Terence (one play).
Plautus (one play).
Prose Composition.

PRIVATE READING:

Quintilian (book x).
Lucan (book vii).
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

GREEK.

CLASS WORK. (12 m.) *Four hours weekly.*

Plato, *Protagoras.*
Selections from the elegiac, melic, and iambic poets.
Sophocles (one play).
Reading at sight.
Prose Composition.

PRIVATE READING:

Aeschylus (one play).
Aristophanes (one play).

GERMAN. (11 a. m.) *Four hours weekly.*

Otis's *Elementary German.*
Whitney's *Grammar.*
Brandt's *German Reader.*
Von Moser, *Der Bibliothekar.*
Goethe, *Egmont.*
Prose Composition.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History.
Modern Europe.
} *Two hours.*
Elements of Economics.
Applied Economics.
} *Two hours.*

ELECTIVE COURSE.† *Two hours weekly.*

FRENCH. (12 m.) *Four hours weekly.*

Whitney's *Brief Grammar.* Exercises in Grammar and Composition. Grandgent's *Exercises* based on Super's *French Reader.*
Super's *French Reader;* Dumas, *L'Evasion du Duc de Beaufort;* Mérimée, *Colomba;* Augier, *Le Gendre de M. Poirier.*

COMPARATIVE PHILOLOGY.

One hour weekly.

*If Chemistry be chosen, it should be taken in the second year, and German in the first year.

†For 1898–99, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Second Group. (*Mathematical-Physical*).

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* von Wildenbruch, *Das edle Blut.*
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

MATHEMATICS. *Four hours weekly.*
- Plane Analytic Geometry.
- Differential and Integral Calculus.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

Second Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Heat.
- Electricity and Magnetism.
- Sound.
- Light.
- Laboratory Work. (*Three hours weekly.*)

MATHEMATICS. (9 a. m.) *Four hours weekly.*
- Determinants.
- Differential and Integral Calculus (special topics).
- Theory of Equations.
- Elements of Projective Geometry.
- Analytic Geometry of Three Dimensions.

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois gentilhomme;* Augier, *Le Gendre de M. Poirier;* Scribe, *Bataille de dames;* Pailleron, *Le Monde où l'on s'ennuie;* Béranger, *Chansons.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Mediæval History. } *Two hours.*
- Modern Europe. }
- Elements of Economics. } *Two hours.*
- Applied Economics. }

PHYSICS. (12 m.) *Four hours class-work weekly.*
- Mechanics.
- Thermodynamics.
- Electricity and Magnetism.
- Physical Optics.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.* *Two hours weekly.*

* For 1898–99, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Third Group. (*Chemical-Biological*).

First Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*

Elementary Mechanics.
Heat.
Electricity and Magnetism.
Sound.
Light.
Laboratory Work. (*Three hours weekly.*)

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*

General Chemistry.
Laboratory Work. (*Five hours weekly.*)

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* von Wildenbruch, *Das edle Blut.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

Second Year.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*

Analytical Chemistry and Chemistry of the Metals.
Chemistry of Carbon Compounds.
Laboratory Work. (*Five hours weekly.*)

BIOLOGY.* (10 a. m.) *Four hours class-work weekly.*

General Biology: Comparative study of selected animals and plants; study of the human skeleton; elements of embryology and of botany.
Laboratory Work. (*Five hours weekly.*)

FRENCH. (12 m.) *Four hours weekly.*

Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois gentilhomme;* Augier, *Le Gendre de M. Poirier;* Scribe, *Bataille de dames;* Pailleron, *Le Monde où l'on s'ennuie;* Béranger, *Chansons.*
Short Outline of French Literature (XVII–XIX Centuries).
Prose Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

Third Year.

BIOLOGY. (9 a. m.) *Four hours class-work weekly.*

Elements of Zoölogy.
Animal Physiology and Histology.
Embryology.
Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History. } *Two hours.*
Modern Europe. }
Elements of Economics. } *Two hours.*
Applied Economics. }

*Students who propose to enter the Medical School, may postpone this course until the last year, taking History and Economics in the second year, and substituting another course for Biology of the third year.

†For 1898–99, elective courses are offered in the following subjects: Differential Equations, Astronomy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Fourth Group. (*Geological-Biological.*)

First Year.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
General Chemistry.
Laboratory Work. (*Five hours weekly.*)

GERMAN. (11 a. m.) *Four hours weekly.*
Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* von Wildenbruch, *Das edle Blut.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
Elementary Mechanics.
Heat.
Electricity and Magnetism.
Sound.
Light.
Laboratory Work. (*Three hours weekly.*)

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

Second Year.

GEOLOGY. (9 a. m.) *Four hours class-work weekly.*
Physical Geology.
Outline Paleontology.
Historical Geology.
Laboratory Work. (*Three hours weekly*).
Excursions.

BIOLOGY. (10 a. m.) *Four hours class-work weekly.*
General Biology: Comparative study of selected animals and plants; study of the human skeleton; elements of embryology and of botany.
Laboratory Work. (*Five hours weekly.*)

FRENCH. (12 m.) *Four hours weekly.*
Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois gentilhomme;* Augier, *Le Gendre de M. Poirier;* Scribe, *Bataille de dames;* Pailleron, *Le Monde où l'on s'ennuie;* Béranger, *Chansons.*
Short Outline of French Literature (XVII-XIX Centuries.)
Prose Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
Outline History.
Critical Study of Important Writers.
Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
Mediaeval History. } *Two hours.*
Modern Europe. }
Elements of Economics. } *Two hours.*
Applied Economics. }

GEOLOGY. (12 m.) *Four hours class-work weekly.*
Crystallography.
Descriptive Mineralogy.
Elementary Petrography.
Laboratory Work. (*Three hours weekly*).
Excursions.

ZOOLOGY (Elective).* *Two hours weekly.*

*One of the following two-hour elective courses may be substituted for Zoology: Differential Equations, Astronomy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Fifth Group. (*Latin-Mathematical.*)

First Year.

LATIN.

CLASS WORK. (9 a.m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Suetonius, *Augustus.*
Horace, *Ars Poetica.*
Vergil, *Æneid* (books ix, xii).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* von Wildenbruch, *Das edle Blut.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a.m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a.m.) *Four hours weekly.*

Juvenal.
Pliny.
Terence (one play).
Plautus (one play).
Reading at Sight.
Prose Composition.

PRIVATE READING:

Quintilian (book x).
Lucan (book vii).
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

FRENCH. (12 m.) *Four hours weekly.*

Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois gentilhomme;* Augier, *Le Gendre de M. Poirier;* Scribe, *Bataille de dames;* Pailleron, *Le Monde où l'on s'ennuie;* Béranger, *Chansons.*
Short Outline of French Literature (XVII–XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
Private Reading.

MATHEMATICS. *Four hours weekly.*

Plane Analytic Geometry.
Differential and Integral Calculus.

Third Year.

MATHEMATICS. (9 a. m.) *Four hours weekly.*

Determinants.
Differential and Integral Calculus (special topics).
Theory of Equations.
Elements of Projective Geometry.
Analytic Geometry of Three Dimensions.

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediæval History.
Modern Europe.
} *Two hours.*
Elements of Economics.
Applied Economics.
} *Two hours.*

* If Chemistry be chosen, it should be taken in the third year, and the courses in Mathematics in the first and second years.

† For 1898–99, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Sixth Group. (*Historical-Political.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* von Wildenbruch, *Das edle Blut.*
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

ANCIENT HISTORY. (10 a. m.) *Four hours weekly.*
- Greece.
- Rome.
- Readings from Classical Historians.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*
- Livy (two books).
- Horace (selections).
- History of Roman Literature.
- Sight Reading.

PRIVATE READING:
- Cæsar, *Bellum Civile* (book i)
- Suetonius, *Augustus.*
- Horace, *Ars Poetica.*
- Vergil, *Æneid* (books ix, xii).

Second Year.

HISTORY. (11 a. m.) *Four hours weekly.*
- Civilization. } *Two hours.*
- Church History. } *Two hours.*
- Renaissance. } *Two hours.*
- Reformation. } *Two hours.*
- France and Germany. } *Two hours.*
- Revolution. } *Two hours.*

ECONOMICS. (10 a. m.) *Four hours weekly.*
- Elements of Economics. } *Two hours.*
- Money; Taxation. } *Two hours.*
- History of Economic Thought. } *Two hours.*
- Tariff; Transportation. } *Two hours.*

FRENCH. (12 m.) *Four hours weekly.*
- Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois gentilhomme;* Augier, *Le Gendre de M. Poirier;* Scribe, *Bataille de dames;* Pailleron, *Le Monde où l'on s'ennuie;* Béranger, *Chansons.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports.
- Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

POLITICS. (12 m.) *Four hours weekly.*
- English Constitutional Law and History.
- American Constitutional Law and History.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

LABORATORY COURSE. *Four hours class-work weekly.*
- Chemistry (9 a. m.), *or* } Lectures, recitations, and laboratory work.
- Physics (10 a. m.), *or* } Lectures, recitations, and laboratory work.
- Biology (10 a. m.). } Lectures, recitations, and laboratory work.

ELECTIVE COURSE.* *Two hours weekly.*

* For 1898–99, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Seventh Group. (*Modern Languages.*)

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Suetonius, *Augustus.*
Horace, *Ars Poetica.*
Vergil, *Æneid* (books ix, xii).

ENGLISH. (1 p. m.) *Four hours weekly.*

Early English Texts.
English Literature.

LABORATORY COURSE. *Four hours classwork weekly.*

Chemistry* (9 a. m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations and laboratory work.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

Second Year.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* von Wildenbruch, *Das edle Blut.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Mediaeval History. } *Two hours.*
Modern Europe.
Elements of Economics. } *Two hours.*
Applied Economics.

FRENCH. (12 m.) *Four hours weekly.*

Daudet, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *Le Bourgeois gentilhomme;* Augier, *Le Gendre de M. Poirier;* Scribe, *Bataille de dames;* Pailleron, *Le Monde où l'on s'ennuie;* Béranger, *Chansons.*
Short Outline of French Literature (XVII–XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports; Private Reading.

ELECTIVE COURSE.† *Three hours weekly.*

Third Year.

A.

FRENCH. (10 a. m.) *Four hours weekly.*

Nineteenth Century, especially the Romantic Movement.
Classical Drama, especially Molière.
History of French Literature.
Laws of Versification.
Composition and Idioms.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports; Private Reading.

or C.

ITALIAN *or* SPANISH. (9 a. m.) *Four hours weekly.*

ELECTIVE COURSE.† *Two hours weekly.*

or B.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Goethe, *Faust;* Schiller, *Wallensteins Lager, Piccolomini.*
Prose Reading.
History of German Literature.
Composition and Grammar.
Private Reading; Schiller, *Wallensteins Tod.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

ENGLISH. (12 m.) *Four hours weekly.*

Anglo-Saxon.
Early Scottish Poets.
Elizabethan Literature.
Literature of the Eighteenth Century.

* If Chemistry be chosen, it should be taken in the second year, and German in the first year.

† For 1898–99, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

SYNOPSIS OF GROUPS.

Group I.	Group II.	Group III.	Group IV.	Group V.	Group VI.	Group VII.
First Year.						
Latin, 9–10. Chemistry, 9–10.* or Biology or Physics } 10–11. Rhetoric, 12–1. Greek, 1–2.	Chemistry, 9–10. German, 11–12. Rhetoric, 12–1. Mathematics.	Chemistry, 9–10. Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Chemistry, 9–10. Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics } 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. History, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics } 10–11. Rhetoric, 12–1. English, 1–2.
Second Year.						
Latin, 10–11. German, 11–12. Greek, 12–1. English Literature.	Mathematics, 9–10. Physics, 10–11. French, 12–1. English Literature.	Chemistry, 9–10. Biology, 10–11. French, 12–1. English Literature.	Geology, 9–10. Biology, 10–11. French, 12–1. English Literature.	Latin, 10–11. French, 12–1. Mathematics. English Literature.	Political Science, 10–11. History, 11–12. French, 12–1. English Literature.	History and Economics, 10–11. German, 11–12. French, 12–1. Elective Course.
Third Year.						
History and Economics, 10–11. Philosophy, 11–12. French, 12–1. Comp. Philology. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Physics, 12–1. Elective Course.	Biology, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Geology, 12–1. Zoology (*elective*).	Mathematics, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	Chemistry, 9–10. or Physics or Biology } 10–11. Philosophy, 11–12. Political Science, 12–1. Elective Course.	French, 10–11. or German, 11–12. or Italian or Spanish } 9–10. Philosophy, 11–12. English, 12–1. Elective Course.

* See footnotes on pages 155, 159, 161.

HOURS OF COLLEGE COURSES.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9	Mathematics (Minor). English Literature. Mathematics (Prelim.).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian. Spanish. French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian. Spanish. French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian. Spanish.	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian. Spanish. French (Elements). German (Elements).
10	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Greek (Preliminary).	Mathematics (Minor). English Literature. Mathematics (Prelim.).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Latin (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Latin (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Latin (Preliminary).
11	German (Major). German (Minor). Philosophy. History (Major).	German (Major). German (Minor). Philosophy. History (Major).	Mathematics (Minor). Philosophy. English Literature. Mathematics (Prelim.).	German (Major). German (Minor). Philosophy. History (Major).	German (Major). German (Minor). Philosophy. History (Major).
12	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology (Major).	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology (Major).	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology (Major).	Mathematics (Minor). Elective Courses. Mathematics (Prelim.). Geology (Major).	Greek (Major). French (Minor). Physics (Major). Political Science (Major). English (Major).
1	Greek (Minor). English (Minor).	Greek (Minor). English (Minor).	Greek (Minor). English (Minor).	Greek (Minor). English (Minor). Greek (Preliminary).	Elective Courses. Greek (Preliminary).

REQUISITES FOR THE DEGREE OF BACHELOR OF ARTS.

As an evidence that the collegiate course has been successfully completed, the degree of Bachelor of Arts is conferred at its close. The degree signifies, in the case of every recipient, such instruction in ancient and modern languages, in mathematics, in the physical and natural sciences, in literature, philosophy, and history, as is believed to be essential to a liberal education. The candidate must, in addition to all the requirements for admission and matriculation, absolve—

(*a*) The following prescribed courses: Rhetoric; English Literature; Economics and History; Philosophy; the minor course* in French and the minor in German; exercises in English Composition, as prescribed by the Collegiate Professor of English; Drawing; Physical and Vocal Culture.

(*b*) Five courses, each occupying four hours weekly for one year, of which at least one must be a major course, and at least one must be a laboratory course†; also an elective course, two hours weekly, during the third year.

In all cases, the candidate must pursue the last year of his undergraduate course in this institution, and must have completed his matriculation before entering upon that year, unless, for special reasons, the Board of Advisers shall have permitted a postponement of some portion of the matriculation requirements. Such special reasons must, in all ordinary cases, be submitted to the Board not later than the close of the year preceding the last; and in no case will they be considered later than October of the last year.

Each instructor files in the office, about the time of the winter and spring recesses and at the close of the year, a report of the progress of each member of his classes, deduced from daily observation, or examinations, or both. These reports are called the Intermediate Records. Other reports (*e. g.* of private read-

*A "minor course" is the first year of instruction in any subject; a "major course" is the second year of instruction.

†If the major course selected be a laboratory course, an additional laboratory course will not be required.

ings, or of the completion of a particular book or subject) may be made by the instructor at any time.

At the close of the year, the University holds an examination of each class on the whole year's work, known as the University Examination, the reports of which are also put on file in the office.

From the Intermediate Records and the Reports of the University Examination, the Board of Collegiate Advisers causes to be made up an average mark, on the authorized scale, for the work of the whole year, which alone determines the standing of any candidate for honors. This constitutes the Final Record.

The reports of all these examinations are carefully recorded and preserved, and the degree of Bachelor of Arts is conferred only when the records show that the prescribed amount of work has been satisfactorily completed.

Regular attendance upon the prescribed exercises is required. Satisfactory certificates must be presented from the teachers of drawing, physical culture, and vocal culture. One or more of the essays which the candidate has written, copied by his own hand in a prescribed style, must be left with the Registrar, before the first of May preceding graduation, for presentation to the Board of Collegiate Advisers.

No uniform length of residence is prescribed as necessary to the attainment of the bachelor's degree. Students who fully meet, at entrance, the requirements for matriculation (see page 168), and who maintain a satisfactory standing in the full work of each year, may be graduated in three years. Other students will require four years. But a young man who comes with attainments beyond what are required for matriculation, or who possesses unusual ability, may complete the work in less than three years. No one is kept back by the requirements of the ordinary class system.

ADVISERS.

Before an undergraduate student begins his academic work, the President designates one of his principal instructors to act as his Adviser, and the approval of the Adviser is necessary before the student can enter upon any course of study. No instructor will receive into a class any student who does not bring with him (in a book provided for that purpose) assurance that his Adviser approves his pursuing the study at that time, and no student is allowed, without the consent of his Adviser, to discontinue any work. Each Adviser endeavors to establish relations of friendliness and confidence with the students assigned to his care; he not only gives counsel in regard to the selection of studies, but promotes the welfare of his students in every practicable way.

REQUIREMENTS FOR ADMISSION.

Those who wish to pursue undergraduate courses, are expected to appear at the regular times appointed for examination in June and October. Persons at a distance desiring information are requested to write for a blank form of "Application for Admission," which may be filled up and returned to the University. Upon its receipt, such counsel will be given as the case requires.

(*a*) Matriculated Students.

Students who fully meet, at entrance, the requirements for matriculation (as stated on pages 168–171), and who maintain a satisfactory standing in the full work of each year, may be graduated in three years.

Students who fail to meet, at entrance, the full matriculation requirements, or whose work, after admission, is unsatisfactory, will need a longer period of residence.

The matriculation examination may be divided, and a part of the subjects passed in one year and the rest a year later, according to the regulations prescribed below (see page 171).

When a school, approved by the Academic Council, shall certify that a candidate has satisfactorily completed *all the studies requisite for matriculation*, such candidate will be exempted from examination, except in the following subjects: Trigonometry, Analytic Geometry, Cicero or Vergil (as the candidate may prefer), Latin Prose Composition, Homer or Herodotus (as the candidate may prefer), Greek Prose Composition, the minor courses in French and German, English, and Science. The examination in these subjects may be divided between June and October of the same year, but, except in the case of English, not between successive years.

(*b*) Candidates for Matriculation.

The matriculation examination may be passed at entrance by those who have completed the courses now offered in several preparatory schools of Baltimore. Persons taught elsewhere are often unable to obtain instruction in all the subjects requisite for matriculation. To meet the needs of such students, terms of admission are offered (as described on page 172), corresponding to the terms of admission to other colleges of established reputation. Students who satisfy these requirements may be admitted to the course of study stated on pages 150, 151. In the case of such persons, a residence of four years will be necessary to the attainment of the degree of Bachelor of Arts.

(*c*) Special Students.

The University discourages from entering as special students those who are not qualified, by age, character, attainments, and habits of study, to attend its classes and lectures with profit to themselves and credit to the institution. The authorities are, however, ready to receive, as special students, properly qualified persons who have some good reason for not pursuing the full course. A special examination is arranged for such persons (see page 172). Many excellent students have been thus enrolled, among whom not a few have subsequently changed their plans,

passed the matriculation examination, and at length received the degree of Bachelor of Arts. The privilege once accorded will be forfeited at any time, if the student is found unworthy of it.

Requirements for Matriculation.

1. *Mathematics.*—Algebra; Plane and Solid Geometry; Plane Trigonometry; Analytic Geometry. A competent knowledge of Arithmetic (including the metric system) is assumed.

The requirements in Algebra include the following subjects:

(*A*). The fundamental rules, use of parentheses, factoring, greatest common divisor, least common multiple, equations of the first degree in one or more unknown quantities, and problems leading to such equations, fractions, inequalities, involution and evolution, theory of exponents, radicals, imaginaries, quadratic equations and problems leading to quadratics.

(*B*). Equations solved like quadratics, simultaneous quadratic equations, theory of quadratic equations, ratio and proportion, the progressions, the binomial theorem, logarithms, permutations and combinations.

The subjects required in Plane and Solid Geometry and in Trigonometry are those treated in the ordinary text-books.

The subjects required in Analytic Geometry are the straight line in rectangular coördinates, transformation of coördinates, loci, and plotting of curves.

Substitution: Students selecting groups which do not include Minor Mathematics or Major Physics, may, in case they offer Greek for matriculation, substitute for Analytic Geometry the *elements* of either French or German (4*b* or 5*b*, page 169).

2. *Latin.*—Cæsar, *Gallic War*, books i–v; Vergil, *Eclogues* and *Aeneid*, books i–vi; Ovid (Allen and Greenough's Ovid, pp. 1–74, 176–195, or Kelsey's); Cicero, the four orations against Catiline, *de imperio Pompeii*, *pro Archia*, and *in Verrem, actio I;* translation of easy English prose into Latin.

Substitution: Sallust's *Catiline* may be substituted for the fifth book of Cæsar, and Cicero's *de Senectute* for the *de imperio Pompeii.*

The examination will test the power of exact and idiomatic translation, the knowledge of forms, of syntax, and of prosody. In certain cases a candidate may be allowed to take an oral instead of a written examination. If, for instance, he has not been prepared on the books above prescribed, but has read about the same amount in other books, he may be examined on these.

3. *Greek.*—Xenophon, *Anabasis*, books i–iv; Homer, *Iliad*, books i–iv; Herodotus, book vii; translation of easy English prose into Greek.

Candidates will be expected to show an accurate knowledge of forms, and an acquaintance with the common rules of syntax and accent, and with the prosody of the Homeric poems.

In case any candidate has made his preparation by the study of books other than those named above, or for any reason believes that an oral examination would be for his advantage, he may be examined upon easy passages previously unseen; if he acquits himself well, he will be required to put on paper only the passage given to be translated into Greek prose.

4, 5. *German and French.*—Candidates not offering Greek must offer one of the following combinations. In one of these languages the elements are required; in the other, an amount of knowledge equal to that represented by the minor or first year's collegiate course:

4.

(*a*) *German.*

Otis's *Elementary German.*
Buchheim's *German Reader, Part I,* and 71 pp. of *Part II.* (Clarendon Press).
Schiller, *Wilhelm Tell* (Clarendon Press, large edition).
Goethe, *Egmont* (ed. Buchheim).
Lessing, *Minna von Barnhelm* (Clarendon Press).
Heine, *Harzreise* (Clarendon Press).
Freytag, *Aus dem Staate Friedrichs des Grossen* (ed. Hager).
Prose Composition (Whitney's *Grammar,* Exercises, 2d Series).

(*b*) *French.*

Whitney's *Grammar, Part I.*
Super's *French Reader, Parts II, III, IV;* J. Verne, *Michel Strogoff* (ed. Lewis).

5.

(*a*) *French.*

Whitney's *Grammar, Parts I* and *II,* substituting for the exercises of *Part II,* "*Materials for French Composition, Part I,* based on Halévy's *L'Abbé Constantin*" (ed. Grandgent; Heath & Co.).
Super's *French Reader, Parts II, III, IV;* J. Verne, *Michel Strogoff* (ed. Lewis); Mérimée, *Colomba;* Daudet, *Contes* (ed. Cameron).
Molière, *L'Avare;* Hugo, *Hernani* (ed. Matzke); Augier, *Le Gendre de M. Poirier;* Sandeau, *Mlle de la Seiglière* (ed. Warren).

(*b*) *German.*

Otis's *Elementary German.*
Buchheim's *German Reader, Part I,* pp. 3–68.
Meissner's *German Conversation,* pp. 1–54.

The amount of German and French accepted as a substitute for Greek at matriculation may not count also as a part of the work required for graduation.

Reading at Sight. The language papers, both ancient and modern, will contain one passage, or more, of moderate difficulty, not included in the prescribed lists. A good handling of passages previously unseen will go far toward compensating for deficiencies in the formal requirements. This does not apply, however, to the examination in the *elements* of French and German.

6. *English.*—The examination will consist of two parts:

I. *Reading.* The candidate will be required to write a paragraph or two on each of several topics chosen by him from a considerable number—perhaps ten or fifteen—set before him in the examination paper. This part of the examination is designed, primarily, to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. As additional evidence of preparation, the

candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work.

The books set for this part of the examination will be:—

In 1898: Milton's *Paradise Lost*, Books I and II; Pope's *Iliad*, Books I and XXII; *The Sir Roger de Coverley Papers* in *The Spectator*; Goldsmith's *The Vicar of Wakefield*; Coleridge's *Ancient Mariner*; Carlyle's *Essay on Burns*; Lowell's *Vision of Sir Launfal*; Hawthorne's *The House of the Seven Gables.*

In 1899: Dryden's *Palamon and Arcite*; Pope's *Iliad*, Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator*; Goldsmith's *The Vicar of Wakefield*; Coleridge's *Ancient Mariner*; De Quincey's *The Flight of a Tartar Tribe*; Cooper's *The Last of the Mohicans*; Lowell's *Vision of Sir Launfal*; Hawthorne's *The House of the Seven Gables.*

In 1900: Dryden's *Palamon and Arcite*; Pope's *Iliad*, Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator*; Goldsmith's *The Vicar of Wakefield*; Scott's *Ivanhoe*; De Quincey's *The Flight of a Tartar Tribe*; Cooper's *The Last of the Mohicans*; Tennyson's *The Princess*; Lowell's *Vision of Sir Launfal.*

In 1901: Shakespeare's *The Merchant of Venice*; Pope's *Iliad*, Books I, VI, XXII, and XXIV; *The Sir Roger de Coverley Papers* in *The Spectator*; Goldsmith's *The Vicar of Wakefield*; Coleridge's *Ancient Mariner*; Scott's *Ivanhoe*; Cooper's *The Last of the Mohicans*; Tennyson's *The Princess*; Lowell's *Vision of Sir Launfal*; George Eliot's *Silas Marner.*

II. *Study and Practice.* This part of the examination presupposes the careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy.

The books set for this part of the examination will be:—

In 1898: Shakespeare's *Macbeth*; Burke's *Speech on Conciliation with America*; De Quincey's *The Flight of a Tartar Tribe*; Tennyson's *The Princess.*

In 1899: Shakespeare's *Macbeth*; Milton's *Paradise Lost*, Books I and II; Burke's *Speech on Conciliation with America*; Carlyle's *Essay on Burns.*

In 1900: Shakespeare's *Macbeth*; Milton's *Paradise Lost*, Books I and II; Burke's *Speech on Conciliation with America*; Macaulay's *Essays on Milton and Addison.*

In 1901: Shakespeare's *Macbeth*; Milton's *L'Allegro*, *Il Penseroso*, *Comus*, and *Lycidas*; Burke's *Speech on Conciliation with America*; Macaulay's *Essays on Milton and Addison.*

The reading and study of the works named above is recommended to all candidates; equivalents will, however, be accepted, provided that the amount of reading be about equally divided between prose and verse.

In connection with the reading and study of the required books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be memorized. The essentials of English Grammar should not be neglected in preparatory study.

Note.—No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

Although candidates will be permitted to take the entire examination at entrance, it is strongly recommended that Part I be taken as a preliminary examination, and Part II as a final examination. Candidates will thus have an opportunity to make up deficiencies which may be discovered at the preliminary examination, and to enter the University without a condition in English.

7. *History.*—The outlines of the History of England and the United States, or of the History of Greece and Rome, and the outlines of Geography.

Gardiner's English History for Schools and Johnston's History of the United States for Schools are recommended as sufficient for candidates in modern history; Oman's Greece and Allen's Rome, for candidates in classical history.

8. *Science.*—The elements of Chemistry, Botany, or Physical Geography.

The examination is intended to determine whether the candidate has a knowledge of the elementary facts of one of these sciences, based on practical study. Those who take the examination in Chemistry will be examined in Remsen's "Elements of Chemistry," and will be required to have performed the experiments described in Remsen's "Laboratory Manual," and to present their laboratory note-books for examination. The requirements in Botany will be a knowledge of the structure of plants, such as may be obtained from a study of Spaulding's "Introduction to Botany," excluding the microscopic work, and the ability to use Gray's Manual in determining the species of flowering plants. The examination will be mainly practical. In order to absolve the requirements in Physical Geography, the student must pass an examination on Hinman's "Eclectic Physical Geography."

Division of the Matriculation Examination.

A student may pass a part of the matriculation examination one year before his admission to the University, and receive credit for the same under the following conditions:

In his application he must distinctly declare his intention to divide the examination. The subjects thus passed will not count towards matriculation, unless the candidate completes his matriculation the following year. The first part of the divided examination will be confined to the following subjects, of which the candidate will be expected to pass in English (part I), Algebra, one Latin author, and three of the remaining subjects:*

English (Part I).
Algebra (A). (See page 168.)
Plane Geometry.
Cæsar, *Gallic War*, books i–v.
Vergil, *Aeneid*, books i–vi.
Xenophon, or French, or German. (See statement below.)
History of the United States or of Greece.
History of England or of Rome.
Science.

If French or German is offered in place of Xenophon, the candidate will be examined as follows:

In *German:* Otis's *Elementary German;* Buchheim's *German Reader, Part I,* and 71 pages of *Part II;* Schiller's *Wilhelm Tell;* Prose Composition, sentences of moderate difficulty to be translated into German at sight.

Or in *French:* Whitney's *Grammar, Part I,* with the exercises; Super's *French Reader, Parts II, III, IV;* Mérimée, Sandeau, J. Verne, Augier,

* Schools approved by the Academic Council, according to the plan described on page 167, may recommend for examination in English (part I) and in Science, candidates who do not wish to attempt the other subjects required in the first part of the divided examination.

Daudet—(as on page 169); Prose Composition, sentences of moderate difficulty to be translated into French at sight.

The whole of the above amounts must be offered.

Requirements for Admission as a Candidate for Matriculation.

1. *Mathematics.*—Algebra (A and B); Plane Geometry (as for matriculation). A competent knowledge of Arithmetic (including the metric system) is assumed.
2. *Latin.*—Cæsar, *Gallic War*, books i–iv; Vergil, *Aeneid*, books i–vi; Cicero, four orations against Catiline, *de imperio Pompeii, pro Archia;* Ovid, 1000 lines (Allen and Greenough's Ovid, pp. 1–33, 176–180, or Kelsey's); translation of easy English prose into Latin.
3. *Greek.*—Xenophon, *Anabasis*, books i–iv; Homer, *Iliad*, books i–iii; translation of easy English sentences into Greek.
4. *German* and *French* (in substitution for *Greek*):
   German.—Otis's *Elementary German;* Buchheim's *German Reader, Part I*, pp. 3–68; Meissner's *German Conversation*, pp. 1–54.
   French.—Whitney's *Grammar, Part I;* Super's *French Reader, Parts II, III, IV;* J. Verne, *Michel Strogoff* (ed. Lewis).
5. *English,*—(as for matriculation).

6 and 7. *History* and *Science,*—(as for matriculation).

Requirements for Admission as a Special Student.

Before an undergraduate is admitted as a special student, in studies other than those preliminary to Applied Electricity, he will be required, unless expressly excused for definite reasons, to pass examinations in the following subjects:

1. *Mathematics.*—Algebra; Plane and Solid Geometry. (As for matriculation.) A competent knowledge of Arithmetic (including the metric system) is assumed.
2. *Latin.*—Cæsar, *Gallic War*, books i–iv; Cicero, six orations; Vergil, *Aeneid*, books i–vi, and *Eclogues*.
3. *Greek.*—Xenophon, *Anabasis*, books i–iv; Homer, *Iliad*, books i, ii.

Substitution: Students who do not offer Greek, will be examined in French or German as specified under "Division of the Matriculation Examination" (page 171), and in the History of Greece and Rome. Oman's Greece and Allen's Rome are recommended.

4. *English,*—(as for matriculation).
5. *United States History,*—(as for matriculation).
6. *Science,*—(as for matriculation).

An undergraduate applying for admission as a special student in subjects preliminary to the course in Applied Electricity, will be required to pass in the subjects specified below. He will not be permitted to divide the entrance examination between successive years.

1. *Mathematics.*—Algebra; Plane and Solid Geometry; Plane Trigonometry; Analytic Geometry. (As for matriculation). A competent knowledge of Arithmetic (including the metric system) is assumed.
2. *French* or *German*,—(as specified under "Division of the Matriculation Examination," page 171).
3. *English*,—(as for matriculation).
4. *United States History*,—(as for matriculation).
5. *Science*,—(as for matriculation).

After admission, and before entering upon the course in Applied Electricity, the student must complete the minor and major courses in mathematics and physics, the minor course in chemistry, the course in rhetoric and English composition, and the course in free-hand and instrumental drawing.

A certificate of proficiency is given to those students who complete the course in Applied Electricity, and who possess a reading knowledge of *both* French and German.

THE JOHNS HOPKINS MEDICAL SCHOOL.

Detailed statements as to the courses of instruction and other information are given in the Annual Announcement of the Johns Hopkins Medical School, which will be sent upon application to the Registrar of the University.

TERMS OF ADMISSION.

The medical department of this university is planned for the professional education of those students who have been especially fitted to receive its instruction by a course of preliminary training in the liberal arts, and especially in those branches of science, like physics, chemistry, and biology, which underlie the medical sciences. Men and women are admitted upon the same terms.

As candidates for the degree of Doctor of Medicine the school receives:

1. Those who have satisfactorily completed the Chemical-Biological course which leads to the A. B. degree in this university.

2. Graduates of approved colleges or scientific schools who can furnish evidence: (*a*) That they have acquaintance with Latin and a good reading knowledge of French and German; (*b*) That they have such knowledge of physics, chemistry, and biology as is imparted by the regular minor courses given in these subjects in this university.

The phrase "a minor course," as here employed, means a course that requires a year for its completion. In physics, four class-room exercises and three hours a week in the laboratory are required; in chemistry and biology four class-room exercises and five hours a week in the laboratory, in each subject.

Many inquiries have been received regarding the character and amount of the requisite training indicated by the term "Minor Course" in these sciences. In explanation, it may be stated, with respect to Biology, that the candidate should have followed for at least a year a laboratory course in the structure, life history, and vital activities of selected types of animal and vegetable life. In the Chemical-Biological course for undergraduates in

this university, the laboratory work in biology at present includes the study of such types as amœba, hæmatococcus, yeast, penicillium, bacteria, mushroom, hydra, vorticella, a fern, a flowering plant, the earthworm, lobster, anodon; the gross and minute anatomy of the frog, the development of its eggs, the structure, formation, and metamorphoses of the tadpole; the study and drawing of the bones in the human skeleton; the comparison of some parts of related vertebrate skeletons; dissection of a mammal; the field and laboratory study of some few flowering plants. The laboratory work is the more important part, the lectures and other exercises subsidiary. It is, of course, not to be understood that this curriculum of biological work must be rigidly followed. Equivalent work will be accepted.

The candidate should have followed a course in general Chemistry for at least a year. This course should include laboratory work, about five hours a week through the year, and lectures and class-room work covering the outlines of inorganic chemistry and the elements of organic chemistry. A good knowledge of the subject as presented in Remsen's "Introduction to the Study of Chemistry" may be regarded as the minimum requirement. A fuller knowledge of Chemistry is, of course, desirable.

In Physics, the candidate should have followed a collegiate course for at least one year. This should include four hours a week of class-room work and at least three hours a week of quantitative work in the laboratory. Special attention should be given to theoretical mechanics and to the mechanical and electrical experiments.

3. Those who give evidence by examination that they possess the general education implied by a degree in arts or in science from an approved college or scientific school, and the knowledge of French, German, Latin, physics, chemistry, and biology above indicated.

Applicants for admission will receive blanks to be filled out relating to their previous courses of study.

They are required to furnish certificates from officers of the colleges or scientific schools where they have studied, as to the courses pursued in physics, chemistry, and biology. If such certificates are satisfactory, no examination in these subjects will be required from those who possess a degree in arts or in science from an approved college or scientific school.

Candidates who have not received a degree in arts or in science from an approved college or scientific school, will be required (1) to pass, at the beginning of the session in October, the matriculation examination for admission to the collegiate department of the

Johns Hopkins University; (2) then to pass examinations equivalent to those taken by students completing the Chemical-Biological course which leads to the A. B. degree in this University; and (3) to furnish satisfactory certificates that they have had the requisite laboratory training as specified above. It is expected that only in very rare instances will applicants who do not possess a degree in arts or in science, be able to meet these requirements for admission.

Hearers and special workers, not candidates for a degree, will be received at the discretion of the Faculty.

Admission to Advanced Standing.

Applicants for admission to advanced standing must furnish evidence (1) that the foregoing terms of admission as regards preliminary training have been fulfilled, (2) that courses equivalent in kind and amount to those given here, preceding that year of the course for admission to which application is made, have been satisfactorily completed, and (3) must pass examinations, at the beginning of the session in October, in all the subjects that have been already pursued by the class to which admission is sought. Certificates of standing elsewhere cannot be accepted in place of these examinations.

GENERAL PLAN OF INSTRUCTION.

The course of instruction is planned for those who have received a liberal education and the training in physics, chemistry, and general biology which has been specified. The required period of study for the degree of Doctor of Medicine is four years. The academic year begins on the first of October and ends about the middle of June. There are short recesses at Christmas and Easter.

The first two years of the course are devoted mainly to the fundamental medical sciences, a large part of the time being spent in practical work in the laboratories. In the latter two years, medicine, surgery, obstetrics, and the various specialties are studied in the clinical laboratories, the dispensary, and the wards of the hospital.

The principal studies of the first year are anatomy, including normal histology, microscopic anatomy, embryology, physiology, and physiological chemistry. The study of anatomy and physiology is continued in the second year. Throughout the second year general pathology, pathological anatomy, and pharmacology are studied. A practical course in bacteriology, with the chief emphasis upon its hygienic and pathological bearings, is given during three months of this year.

Upon the basis of thorough training in the medical sciences, pursued during the first two years of the course, the student should now be well fitted to undertake the study of practical medicine and surgery.

During the third year the general principles of medicine, surgery, and obstetrics are studied, and clinical instruction in medicine and surgery is given. The study of certain special branches of medicine is also begun. Leading features of the work of this year are the courses in the clinical laboratories and practical work in the dispensary.

During the fourth year the practical study of medicine, surgery, and obstetrics is continued, and instruction is given in gynecology and in the various special branches of medicine and surgery, viz.: dermatology, diseases of the nervous system, genito-urinary diseases, laryngology, ophthalmology and otology, paediatrics, and psychiatry. In this year the students serve as clinical clerks and surgical dressers in the wards of the hospital and are in daily attendance at special classes in the dispensary. They also attend cases of labor in the obstetrical wards of the hospital, and, under proper supervision, in the homes of patients. For the ward and dispensary work the class is divided into small groups.

Instruction in hygiene, medical zoölogy, forensic medicine, and medical history is provided during the course.

Work in the dissecting room, in the laboratory, and at the bedside, demonstrations, clinics, lectures, and recitations are the main features of the methods of instruction. Simply didactic lectures occupy a subsidiary position, as compared with instruction by recitations and demonstrations and especially by practical work in the various laboratories, in the hospital wards, and in the dispensary. In consequence of the high standard of admission, the

classes are not likely to be excessively large, and abundant opportunity is therefore afforded for practical work for each studen and for personal contact between teacher and student.

SPECIAL COURSES FOR GRADUATES IN MEDICINE.

Special courses of instruction for graduates in medicine are given during the months of May and June. These courses are in Pathology, Bacteriology, Clinical Microscopy, Medicine (including Diseases of Children and of the Nervous System), Surgery, Gynecology, Dermatology, Laryngology, and Ophthalmology and Otology. The instruction is intended to meet the requirements of practitioners of medicine, and is almost wholly of a practical character. It includes laboratory courses, demonstrations, bed-side teaching, and clinics in the wards, dispensary, amphitheatre, and operating rooms of the hospital. A preliminary course in normal histology for physicians is given during April.

FELLOWSHIPS.

I. Fellowships by Courtesy.

The Academic Council may, at their discretion, by special vote, enroll as Fellows by Courtesy

(*a*) Gentlemen who are or who have been teachers in colleges and other like institutions, and who wish, for brief periods, to avail themselves of the opportunities here afforded for study and for the use of books and laboratories.

(*b*) Holders of fellowships in other colleges, during their residence here.

(*c*) Those who have been fellows of this University and desire to continue in residence.

Fellows by Courtesy will not be exempt from the payment of fees, except by a special vote.

II. Fellowships.

Twenty fellowships, each yielding five hundred dollars but not exempting the holder from the charges for tuition, are annually awarded in this University.

The system of fellowships was instituted for the purpose of affording to young men of talent from any place an opportunity of continuing their studies in the Johns Hopkins University, while looking forward to positions as professors, teachers, and investigators, or to other literary and scientific vocations. The fellowships are given to young men who wish to follow systematically through the year the instructions of the teachers here engaged, and those who are appointed are expected to proceed to the degree of Doctor of Philosophy. The appointments are not made as rewards for good work already done, but as aids and incentives to good work in the future; in other words, the fellowships are not so much honors and prizes bestowed for past achievements, as helps to further progress and stepping-stones to honorable intellectual careers. They are not offered

to those who are definitely looking forward to the practice of any one of the three learned professions (though such persons are not formally excluded from the competition), but are bestowed almost exclusively on young men desirous of becoming teachers of science and literature, or proposing to devote their lives to special branches of learning which lie outside of the ordinary studies of the lawyer, the physician, and the minister. Appointments are rarely if ever made of graduates of more than five years' standing.

Each candidate is expected to submit his college diploma or other certificate of proficiency from the institution where he has been taught, with recommendations from those who are qualified to speak of his character and attainments. But this is only introductory. He must also submit, orally or in writing, such evidence of his past success in study and of his plans for the future, together with such examples of his literary or scientific work, as will enable the professors to judge of his fitness for the post. The examination is, indeed, in a certain sense competitive; but not with uniform tests, nor by formal questions submitted to the candidates. First, the head of a given department considers, with such counsel as he may command, the applicant's record. The professors then collectively deliberate on the nominations made by individual members of their body. The list upon which they agree, with the reasons for it, is finally submitted by the President of the University to the Executive Committee, and by them to the Trustees for final registration and appointment. By all these precautions the highest results which were anticipated have been secured. A company of most promising students has been brought together, and their ability as teachers and scholars has been recognized by the calls they have received to permanent and desirable posts in various parts of the country.

The number of applications for fellowships has hitherto been very large, and it may have happened that some candidates have failed of appointment who were really superior to those selected. But if so, this has resulted from the fact that a considerable number of applicants have each year forwarded to the University merely testimonials from their instructors, without any such examples of their own work as have been mentioned above; and, in consequence, the professors, from want of adequate knowledge,

have possibly passed over candidates who may have been in the highest degree meritorious.

The applicants are notified of the result by means of a printed list of the successful candidates.

The absence of candidates from Baltimore has been no bar to their appointment, in cases where adequate evidence of their claims has been presented; but it is obvious, from the nature of the case, that graduate students residing in Baltimore must have better opportunities than others of making known their powers to the appointing board, and during the last few years the number of persons appointed, who had not previously been resident here, is very small.

REGULATIONS.

1. The application must be made prior to May 1, in writing, addressed to the President of the University, and he will refer the papers to the Academic Council, by whom the nominations will be made to the Board of Trustees, at their meeting in June. There is no prescribed form of application.

2. The candidate must give evidence of a liberal education, such as the diploma of a college of good repute; of decided proclivity towards a special line of study, such as an example of some scientific or literary work already performed; and of upright character, such as a testimonial from some instructor.

3. The value of each fellowship is five hundred dollars. The holder is not exempt from the charges for tuition. In case of resignation, promotion, or removal from the fellowship, payments will be made for the time during which the office shall have been actually held.

4. Every holder of a fellowship will be expected to perform such duties as may be allotted to him in connection with his course of study, to act when called upon as an examiner or as moderator in the examination-room, to give all his influence for the promotion of scholarship and good order, and in general to co-operate in upholding the efficiency of the University, as circumstances may suggest. He must reside in Baltimore during the academic year.

5. He will be expected to devote his time to the prosecution of special studies (not professional), under the direction of the head of the department to which he belongs, and before the close of the year to give evidence of progress by the preparation of a thesis, the completion of a research, the delivery of a lecture, or by some other method.

6. He may give instruction, with the approval of the President, by lectures or otherwise, to persons connected with the University, but he may not engage in teaching elsewhere.

7. He may be reappointed at the end of the year, but only for exceptional reasons.

8. Usually not more than two fellows will be appointed in any department of study.

9. As these fellowships are awarded as honors, those who are disposed, for the benefit of others, or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list.

III. Adam T. Bruce Fellowship.

This fellowship was founded by the mother of Adam T. Bruce, Ph. D., late Fellow and Instructor in this University, as a memorial of her son, and is awarded annually. It is bestowed by the appointing board upon the candidate whom they consider most likely to promote biological science, and especially animal morphology, by original research. The stipend will be the income of the Adam T. Bruce Fellowship endowment of ten thousand dollars. Preference is given to those who have already held fellowships in the Johns Hopkins University.

The electors consist of the President of the University, the chief instructor in animal morphology, the chief instructor in animal physiology, and a non-resident member annually chosen by the resident electors. The non-resident elector for the year 1897–98 was Professor Maynard M. Metcalf, Ph. D., of the Woman's College of Baltimore.

Appointments already Made.

1888. Henry Van Peters Wilson, Ph. D.
1889. Shozaburo Watase, Ph. D.
1890. Thomas Hunt Morgan, Ph. D.

1891. Robert Payne Bigelow, Ph. D.
1892. Robert Payne Bigelow, Ph. D.
1893. Maynard Mayo Metcalf, Ph. D.
1894. Ross Granville Harrison, Ph. D.
1894. Seitaro Goto, M. S.
1895. Henry McElderry Knower, Ph. D.
1895. George Lefevre, Ph. D.
1896. George Lefevre, Ph. D.
1897. Franklin Story Conant, Ph. D.
1897. Duncan Starr Johnson, Ph. D.

Regulations.

Candidates for the Bruce Fellowship must make application, in writing, to the President of the Johns Hopkins University before the first of May of the year of their candidature. They must forward to the President, at the same time, such evidence of their qualifications for appointment as they desire to be considered by the electors.

The electors may require any candidate to appear before them in person.

The Bruce Fellow shall devote his time to study and research in Biology at a place approved of by the President of the University, and he shall, during the month of February in the year of his tenure of the fellowship, send to the President a written statement of the scientific work accomplished by him since his appointment.

The tenure of the fellowship shall commence on the first of September in the year of appointment.

Two hundred and fifty dollars shall be paid to the Fellow on October 1, and the remainder at convenient intervals during his tenure of the fellowship.

The holder of the Bruce Fellowship shall not be more than thirty years of age at the date of his election.

The Bruce Fellow may be re-elected, but not oftener than twice.

The holder of the fellowship shall be exempt from charges for tuition.

The electors shall have the power to declare the fellowship vacant if its holder prove, in their opinion, unworthy; and no further stipend shall be paid to such person.

SCHOLARSHIPS.

I. University Scholarships.

[Regulations adopted by the Board of University Studies, May 6, 1891; now republished, subject to an expected revision.]

For the encouragement of scholarship among those who have taken the baccalaureate degree and wish to continue their studies here, twenty university scholarships are annually bestowed.

1. Ten of these scholarships are awarded in June, by the Board of Collegiate Advisers, to those young men who have completed their undergraduate course during the current session in this University and who stand first in point of scholarship.

2. The remaining ten, and any of the others made vacant by resignation or otherwise, are open about the first of January to graduates of this or of other institutions who have been studying here during the previous part of the session. Those who wish to be candidates must address their applications to the President of the University, who will appoint a committee of five to consider the applications, and, with the aid of such evidence as may be obtained, to make nominations from among the applicants to the Board of University Studies.

3. The emolument of these scholarships, which are tenable for one year, will be the equivalent of two hundred dollars, part of which will be applied to the payment of tuition fees, while the rest will be paid in money.

4. These scholarships are to be awarded as honors, and those who are disposed, for the benefit of others or for any other reason, to waive the pecuniary emolument, or who are desirous of studying elsewhere, may do so and still have their names retained on the honor list. Those who receive the emolument will be expected to pursue their studies exclusively in this University.

5. The Board will reserve appointments if worthy candidates do not offer.

6. Students who receive honorable mention, without appointment to scholarships, are not entitled to the remission of tuition fees.

II. Hopkins Scholarships.

In the will of the founder of the University, his Trustees are requested to "establish, from time to time, such number of free scholarships in said University as may be judicious, and to distribute the said scholarships among such candidates from the States of Maryland, Virginia, and North Carolina, as may be most deserving of choice, because of their character and intellectual promise, and to educate the young men so chosen free of charge."

Forty-five such scholarships will be bestowed for the next academic year,—upon fifteen students from each of the three States named. These scholarships will be of two grades—the ordinary scholarship, entitling the holder to free tuition, and the honorary scholarship, entitling him to free tuition and a stipend of seventy-five dollars.

Students can be recognized as candidates only when actual residents of the State, from which they desire to be appointed, during at least the year next preceding their enrolment in the University. If the appointing board is not sure as to the legal residence of any candidate, the point in question shall be determined by the Executive Committee of the Board of Trustees.

These scholarships are all bestowed for merit and are tenable for the year subsequent to the appointment, the holders being re-eligible.

Successful candidates who are disposed for the benefit of others or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list. The scholarships may be forfeited because of frequent or prolonged absence, defective scholarship, or unworthy conduct.

Scholarships made vacant by resignation, by forfeiture, or by the non-appearance of worthy candidates at the regular times of selection, may be bestowed by the appointing board, at their discretion, upon other candidates who are found worthy, provided that the principles of this foundation are not departed from. In case the holder of a scholarship gives it up for any reason during the course of a session, such part of the stipend will be paid to

him as seems equitable to the Executive Committee of the Board of Trustees.

Holders of scholarships are not exempt from laboratory fees.

Scholars from Maryland.

These scholars are appointed by the Board of Collegiate Advisers, and no one will receive the honor whose standing as a whole is lower than "*good.*"

1. Five of the ordinary scholarships are open to those who have just completed their matriculation examination, and who stand best in a subsequent special examination in mathematics, Latin, and Greek (or French and German).

2. Three of the honorary and two of the ordinary scholarships are awarded to those matriculated students whose records in the studies of the first year are most creditable. By "studies of the first year" is meant either the studies laid down for the first year in one of the regular groups, or such other studies, covering fifteen hours of class-room work weekly (exclusive of work done to satisfy matriculation conditions), as may be approved of by the Adviser.

3. Scholarships are awarded for excellence in the studies of the second year upon the same terms as in the case of the first year; provided that the candidate shall have absolved the studies of the first year as above defined.

Scholars from North Carolina and Virginia.

Experience has led the authorities to believe that the Hopkins Scholarships allotted to North Carolina and Virginia will be more useful if offered to graduate students, rather than to undergraduates. Accordingly, these honors are now awarded like the Fellowships by the Academic Council. Fifteen are open to students from Virginia and fifteen to students from North Carolina who have already received a creditable baccalaureate degree or its equivalent. For each State there are nine ordinary and six honorary scholarships. In case the entire number of scholarships are not required for graduate students, those that remain may be awarded to undergraduates in the order of their merit. Applica-

tions in writing should be filed at the President's office, prior to June 1.

III. Washington Scholarships.

The Trustees offer two scholarships, yielding free tuition, to residents of the District of Columbia. These, like the Hopkins Scholarships, are awarded to undergraduate students for merit, do not carry exemption from laboratory fees, and are tenable for one year, the holders being eligible for re-appointment.

IV. Woodyear Scholarships.

These scholarships were founded in 1893 by Mrs. William E. Woodyear, of Baltimore, as a memorial of her husband. They are five in number—of the value of one hundred dollars each—and are awarded annually for exceptional merit among those who need pecuniary assistance. They are offered primarily to undergraduates.

Charges for Tuition, Laboratory Expenses, etc.

A.

For all Courses except the Medical.

I. *Tuition Fees.*

The charge for tuition is one hundred and fifty dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There is no extra charge for instruction in any department of study, for lectures, or for the use of the library and reading-room. A fee of five dollars per annum is charged for the use of a locker in the gymnasium. Fees are charged, as below stated, for material consumed in the laboratories, for registration, and for diplomas.

No deduction is made at the Treasurer's office because of absence for a period of less than half a year, or because a student gives only a part of his time to study, or because he belongs to but one class. Prompt payment of fees is required.

II. *Registration Fee and Caution Money.*

Every student (including Fellows, Fellows by Courtesy, workers in the laboratories, and attendants upon lectures) pays a registration fee of five dollars and deposits ten dollars as caution money at the time of his enrolment. The caution money is repaid to the student when he leaves the University, if there are no charges against him.

III. *Fees for Attendants on Single Courses.*

Students engaged in other pursuits—clergymen, lawyers, teachers, and other such persons—*who are not candidates for a degree,* are allowed to follow certain courses, not exceeding five lectures weekly, on the payment at one time of fifty dollars per annum. They are not regarded as members of the University, but are enrolled as "attendants upon lectures," and are entitled only to such privileges as they have paid for. Persons who

desire to be so enrolled, are required to make a special written application to the Registrar.

IV. *Graduation Fees.*

The graduation fees are as follows, payable before the delivery of diplomas or certificates:

Doctor of Philosophy, ...	$10.00
Proficient in Applied Electricity, . .	10.00
Bachelor of Arts, ...	5.00

V. *Laboratory Charges.*

In Chemistry: For undergraduates and for graduates who take Chemistry as a subordinate subject, twenty-four dollars a year; for graduates and special students following Chemistry as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Physics: For students who work one afternoon a week, twelve dollars a year; for those who work two afternoons a week, twenty-four dollars a year; for those who take Physics as their principal subject and for second-year students in applied electricity, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Biology: For students who work one afternoon a week, twelve dollars a year; for undergraduates and for graduates who take Zoölogy or Physiology as a subordinate subject, twenty-four dollars a year; for graduates and special students following a biological science as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Geology: For graduates, ten dollars a year.

In all the laboratories, a charge is made for breakage and for apparatus not returned in good condition.

Exception to these charges can be made only at the written request of the Director of a laboratory, approved by the President of the University.

Fellows by Courtesy and others who have the privileges of guests in the various laboratories, are expected to pay the usual laboratory charges.

Doctors of Philosophy of this University who desire to remain for a time in the University after having received their diplomas, may do so without charge for tuition, but they are required to pay the usual laboratory charges.

B.

I. Candidates for the Degree of M. D.

The charge for tuition is two hundred dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There are no extra charges for matriculation, for graduation, for instruction in any department, or for laboratory courses, except for materials consumed.

To a student who does not possess a microscope, there is an annual charge of five dollars for the use of one. The student is responsible for damage to the microscope thus rented.

A deposit of ten dollars as caution money is required from each student at the time of his enrolment. The caution money is repaid the student when he leaves, if there are no charges against him. Special charges are made for breakage and for damage to apparatus.

II. Graduates attending Special Courses in Medicine.

Graduates of medical colleges may be admitted to all the courses in Medicine, Surgery, Gynecology, and special departments of Practical Medicine and Surgery for the sum of $100 (not including the laboratory courses in Pathology, Bacteriology, and Clinical Microscopy), and to single courses on the payment of the fees named below:—

Medicine,	$25
Surgery,	25
Gynecology,	25
Each of the Special Departments of Practical Medicine and Surgery,	25
Clinical Microscopy,	25
Pathological Histology (including post-mortem examinations and pathological demonstrations),	25

Bacteriology, ...	$25
Advanced and special work, ...	25
Preliminary Course in Normal Histology, .	25

In the Pathological and Clinical Laboratories special charges are made for breakage and for damage to apparatus. A deposit of ten dollars as caution money is required, which is returned when the student leaves, if there are no charges against him.

Before entering upon any course of instruction in the Medical School, the student must obtain from the Dean of the Medical School, or his representative, a card certifying that he is qualified to follow the desired course. This card must be presented at the Treasurer's office of the University, where the fees must be paid before permission is granted to attend.

ALPHABETICAL LIST OF NAMES.

	Page.
Abbe, C., Jr.	13
Abbott, A. C.	10
Abel, J. J.	4, 44
Abercrombie, J. R.	80
Abercrombie, R. T.	40
Adams, H. B.	4, 43, 44, 49, 87, 90, 107, 109
Adams, H. C.	49, 59
Adams, H. H.	82
Adams, T. S.	14, 82
Adkins, W. H.	73
Adler, C.	53, 62
Adler, H.	79
Adler, H. M.	27
Agelasto, M. A.	78
Ahrens, A. H.	80
Ahrens, T. G.	80
Akerman, J.	25
Aldrich, T. B.	7
Alexander, W. J.	51, 60
Alleman, G.	70
Allen, E. P.	53
Allen, E. T.	66
Allen, H. W.	25
Allen, W. H.	84
Allinson, F. G.	50, 59
Altvater, G. L.	40
Ames, D.	78
Ames, J. G., Jr.	80
Ames, J. McE.	77
Ames, J. S.	5, 43, 44, 54, 64, 74, 119
Anderson, J. N.	67
Anderson, R. B. T.	39
Anderson, W. P.	84
Andre, D. C.	80
Andrews, C. M.	54, 63
Andrews, E. A.	5, 43, 44, 52, 62, 136
Andrews, F.	80
Annis, B. S.	56
Applegarth, A. C.	62, 74
Applegarth, E. C.	55, 64, 75
Arbuckle, H. B.	14
Armstrong, E. C.	9, 58, 71, 105
Armstrong, J. R. C.	34
Arnold, B. W., Jr.	70
Arnolt, W. M.	52, 62
Artz, C. W.	74
Aspinwall, L. M.	88
Atherton, A. M.	27
Athey, C. N.	31
Austin, M. F.	25
Ayres, B.	50
Ayres, P. W.	54, 62
Baden, W. W.	55, 66, 73
Baer, W. S.	23, 80
Baetjer, F. H.	27, 82
Baetjer, H.	34
Bagby, A., Jr.	65
Bagg, R. M.	68
Baird, W. J.	31
Baker, A. E.	80
Baker, N. D., Jr.	79
Baker, T. S.	8, 56, 68, 78, 103, 104
Baldwin, C. G.	79
Baldwin, W. D.	27
Ballagh, J. C.	8, 68, 81, 107, 110
Ballagh, W. W.	81
Ballard, H. H.	67, 76
Ballard, Z. M.	34
Barcroft, D.	53, 62
Bansemer, W. S.	81
Bardeen, C. R.	9, 72
Barker, E. A.	30
Barker, L. F.	6, 56, 115
Barnett, G. E.	15
Barr, M. L.	11, 15
Bartell, G. E.	40
Barton, B. W.	10, 139
Barton, R., Jr.	78
Bascom, F.	67
Base, D.	68, 78
Basore, J. W.	15
Bassett, J. S.	56, 67
Baumgarten, W.	80
Baxter, A. H.	11, 15, 80
Bayard, R. H.	75
Bayley, W. S.	53, 61, 73
Beadenkopf, T. M.	72
Beale, A. E.	26
Beale, R. B.	15
Beatty, C.	82
Bechtel, E. A.	55, 76
Becker, E. J.	14, 80

Page.
Beeson, J. L. 67
Beeuwkes, C. J. 84
Beeuwkes, R. K. 40
Behle, A. C. 80
Behrend, E. B. 79
Belden, H. M. 68
Belknap, R. E. 83
Bell, C. J. 52
Bell, L. 53, 62
Bemis, E. W. 61
Bennett, J. B. 80
Bennett, L. E. 79
Benson, T. P. 80
Bentley, A. F. 57, 69, 79
Benton, E. J. 15
Berger, E. W. 14
Berkeley, W. N. 15
Berkley, H. J. 7
Bernhard, A. 76
Bernheim, B. 39
Berry, J. M. 28
Berry, T. A. 73
Bestor, O. B. 34
Bettmann, M. 26
Bevan, W. L. 74
Bevier, L. 50, 59
Beyer, H. G. 62
Beyer, S. W. 57, 69
Bibbins, A. 15
Bice, H. H. 76
Bigelow, R. P. 49, 55, 66
Billings, J. S. 10
Billings, J. S., Jr. 76
Binswanger, A. C. 82
Bird, R. M. 15
Bissing, G. 52, 61, 73
Bissing, H 81, 84
Bissing, W. 78
Blachstein, A. G. 55
Black, H. B. 81
Black, H. V. 15
Black, J. W. 65, 76
Blackford, W. S. 80
Blackmar, F. W. 54, 63
Blackshear, C. C. 64
Blake, F. R. 14, 82
Blanchard, W. M. 15
Bliss, W. J. A. 7, 68, 83, 119
Bloodgood, J. C. 7
Bloombergh, H. D. 28
Bloomfield, M. 4, 43, 50, 59, 97
Blume, J. 55
Bogue, H. 84
Bolgiano, W. 76
Bolling, G. M. 12, 56, 70
Bond, A. K. 72
Bonnotte, F. 70
Booker, W. D. 5
Borst, C. A. 54
Bosley, J. R. 28
Bouchelle, B. N. 34
Bowdoin, H. J. 73
Bowdoin, W. G. 2
Bowen, B. L. 62
Bowen, E. W. 66
Bowlus, E. L. 82
Bowman, J. H. 84
Boynton, G. E. 79
Brackett, B. B. 71, 84
Brackett, J. R. 63
Brackett, R. N. 62
Brady, J. H., Jr. 39
Brady, W. B. 15
Branch, B. H. 84
Branch, C. H. H. 81
Brander, W. W. 15
Brandow, M. 8, 56
Breed, A. A. 34
Breithaupt, E. C. 83
Brent, D. K. 34
Briggs, E. 26
Briggs, F. F. 78
Brigham, C. P. 65, 76
Bright, J. W. 5, 43, 51, 60, 100
Bromwell, W. 69, 76
Brooks, C. E. 34
Brooks, W. K. 4, 43, 44, 49, 87, 89, 136, 138
Brough, C. H. 13
Brown, G. D. 15, 81
Brown, G. Stewart 80
Brown, H. M. 76
Brown, J. W. 73
Brown, L. 11, 24, 81
Brown, S. B. 78, 83
Brown, T. M. 78
Brown, T. R. 11, 72, 79
Browne A. L. 76
Browne, B. B., Jr. 34
Browne, S. H. 78, 83
Browne, W. H. 5, 43, 44, 89, 100, 101
Browne, W. H., Jr. 77, 83
Brownell, E. E. 24
Brownell, G. G. 15
Bruce, A. T. 49, 52, 61, 89
Bruce, E. S. 39
Bruce, J. D. 68
Brûlle, H. 26
Brune, H. M. 75
Bruner, J. D. 68
Bruns, R. M. 21
Brush, M. P. 14
Bryan, A. C. 70, 79

Page.
Bryan, J. E. 77
Bucher, J. E. 68
Buck, J. 81
Buckler, H. W. 24, 81
Buckler, T. H. 31, 74
Bump, C. W. 79
Bumstead, H. A. 78
Bunting, C. H. 28
Burgess, E. S. 51
Burgess, I. B. 15
Burke, M. 31
Burnam, C. F. 26
Burney, W. 50
Burnham, W. H. 53, 63
Burrell, J. L. A. 34
Burt, B. C. 51
Burton, R. 9, 63
Burton, W. M. 54, 63
Butler, J. I. 28
Butler, P. 13
Byers, H. G. 15
Caldwell, W. 15
Callahan, J. M. 58, 71
Callaway, M., Jr. 54, 63
Calvert, W. J. 23
Cameron, F. K. 68, 78
Cameron, M. J. 78
Cameron, T. F. P. 80
Campbell, H. 15
Campbell, J. P. 53, 63, 74
Campbell, K. 13
Canfield, W. B. 74
Canter, H. 15
Cantey, J. J. 15
Carey, C. H. 76
Carey, G. 78
Carey, G. G., Jr. 74
Carey, H. W. 28
Carey, N. P. 78
Carichoff, E. R. 83
Carmichael, N. R. 57
Carpenter, F. A. 30
Carr, A. G. 31
Carroll, A. M. 56, 67
Carson, R. E. 77
Carson, W. H. 77
Carter, E. P. 58
Carter, W. F. 31
Casanowicz, I. M. 66
Case, W. A. 16
Caspari, C. E. 16, 82
Cassidy, P. J. 23
Cator, G. 40
Cattell, J. M. 52
Chace, E. S. 26
Chamberlain, J. S. 14

Page.
Chamberlin, W. E. 68
Chambers, A. D. 57, 70
Chambers, L. M. 34
Chandler, J. A. C. 70
Chapman, C. H. 54, 64, 76
Chapman, J. W., Jr. 70
Cheney, W. F. 30
Chesnut, W. C. 79
Chessin, A. S. 6, 43, 116, 118
Cheyne, T. K. 10
Child, C. G. 57, 69
Chittenden, A. S. 26
Chowning, W. M. 28, 81
Christian, H. A. 26
Christie, F. A. 53
Clark, C. B. 81
Clark, C. C. 82
Clark, C. T. 34
Clark, H. L. 58, 71
Clark, W. B. 5, 43, 129, 134
Clark, W. L. 80
Clarke, F. A. 80
Clarke, G. M. 34
Clarke, H. 53
Clarke, S. F. 49, 59
Clarkson, W. B. 73
Cleaver, W. M. 16
Clunet, F. J. 34
Clutz, F. H. 57, 71
Coale, R. D. 51, 59
Coates, C. E., Jr. 65, 75
Coblens, G. A. 81
Coe, J. W. 23
Cohen, A. 8, 56, 68, 78, 116
Cohen, M. S. 80
Coker, W. C. 16
Cole, R. I. 24
Cole, W. R. 75
Collier, F. W. 82
Comer, R. T. 28
Comstock, E. 28
Comstock, G. F. 81
Comstock, W. J. 51
Conant, F. S. 49, 57, 71
Cone, B. M. 80
Cone, C. 30
Cone, S. M. 8, 77
Conklin, E. G. 55, 65
Conn, H. W. 60
Connor, G. L. 28
Connor, R. 28
Conrad, C. A. 81
Constantine, C. W. 39
Cook, C. G. 16
Cook, H. W. 34
Cook, V. 77

Page.
Cooke, H. W.... 78
Cooke, T., Jr.... 76
Cooley, H. S.... 70
Cooper, J. C.... 16
Corbin, M. M.... 84
Corning, J. W.... 84
Cottman, L. W.... 84
Cox, E. L.... 80
Cox, W....23, 81
Craig, T....4, 43, 49, 59, 87, 90, 116
Crane, F.... 16
Craven, A. F.... 67
Crawford, A. C.... 8
Crenshaw, J. B....8, 44, 67
Crew, H....52, 62
Cromwell, W. K.... 74
Crum, C. W. R.... 74
Crummer, E. P.... 39
Cullen, T. S.... 7
Culver, F. B.... 77
Currie, M. L.... 30
Cushing, H. W.... 9
Cutting, S. W.... 66
Daish, J. B.... 76
Dancy, W. R.... 26
Daniel, W. B.... 16
Daniels, A. L.... 52
Darrell, H. C.... 84
Dashiell, P. J....65, 75
Davidson, G. D.... 34
Davis, E. W....52, 60
Davis, F. C.... 24
Davis, J. E.... 79
Davis, J. S.... 24
Davis, W. S....11, 72
Dawson, P. M....23, 81
Day, D. T....52, 60, 73
Day, W. C....51, 60, 72
Day, W. S.... 71
De Grange, M.... 34
De Haan, F....57, 69
Delitzsch, F.... 88
Dembitz, A. A.... 78
Dennis, J. T.... 42
De Roode, R. J. J....55, 64
Detwiler, A. K.... 78
Deutsch, I.... 84
Devries, W. L....55, 66, 76
Dewey, D. R....53, 61
Dewey, J....52, 60
Dieffenbach, A. C.... 34
Diehl, C. E.... 82
Diggs, C. F., Jr.... 39
Dixon, W. T.... 2
Dobbin, G. W....8, 78
Dobyns, F.... 31

Page.
Dohme, A. R. L....63, 74
Dohme, G. C.... 34
Donaldson, F.... 40
Donaldson, H. H....51, 61
Dorr, L. B.... 77
Dorsey, H. G.... 16
Dorsey, N. E....9, 58, 71, 80
Dorsey, W. R.... 82
Doub, A. A.... 74
Doughty, H. W.... 83
Douglas, J. M.... 16
Dowell, H. B.... 80
Downes, H. C.... 35
Drake, G. S.... 28
Drew, G. A.... 13
Drewry, W. S.... 16
Dreyer, G. P....6, 55, 64, 75, 137
Dryer, J. L.... 31
Dudley, H.... 16
Duffy, E., Jr.... 75
Duffy, R.... 35
Duggan, J. H.... 31
Duggan, J. R....52, 60
Duncan, L....5, 43, 44, 61, 119
Durfee, W. P....51, 60
Dutcher, A.... 28
Dyar, H. M.... 83
Eager, J. H., Jr.... 35
Earhart, R. F.... 16
Ebeling, H. L....55, 65, 73
Eckels, W. A.... 12
Edes, R. E.... 77
Edgar, P....58, 71
Edmond, G. W.... 74
Edmondson, J. H.... 80
Edmunds, C. K....14, 82
Egge, A. E....53, 62
Eggers, A. H.... 26
Eichelberger, W. S....54, 65, 74
Eiesland, J.... 14
Eisenbrandt, W. H.... 84
Eisendrath, D. N.... 77
Eisenhart, L. P.... 16
Eldridge, G. D., Jr.... 82
Elliott, A. M....4, 43, 44, 88, 105
Elmer, H. C....53, 63
Elting, A. W.... 23
Ely, G. S....51, 60
Ember, A.... 39
Emerson, A.... 52
Emerson, C. P.... 24
Emerson, W. H....53, 61
English, H.... 74
Ensor, J. T.... 21
Epler, B. N.... 24
Erlanger, J.... 24

Page.
Estes, C. S. 69
Evans, H. C. 26
Evans, P. S., Jr. 24
Everett, W. T. 41
Ewell, J. E. 39
Ewing, J. R. 16
Fahlberg, C. 50
Fairbank, R. 26
Fairclough, H. R. 54, 70
Fairweather, H. O. 30
Farr, J. M. 16
Farrar, C. B. 26
Fassig, O. L. 9, 129
Faust, A. B. 55, 66, 77
Faust, E. S. 77
Fay, E. A. 59
Fay, E. W. 54, 64
Fay, H. 69
Fearn, T. 30, 31
Fels, M. 73
Ferguson, J. F. 35
Fernald, H. T. 64
Ferren, H. M. 56
Ferry, E. S. 56
Field, G. W. 66
Fields, J. C. 53, 62
Fifield, J. C. 75
Finney, J. M. T. 6
Fischer, J. S. 35
Fisher, A. L. 26
Fisher, F. C. 35
Fisher, W. A., Jr. 26
Fitzgerald, T., Jr. 35
Fitzhugh, H. M., Jr. 31
Fleming, W. S. 52
Fletcher, H. 26
Fletcher, L. B. 51, 59
Fletcher, R. 10
Flexner, A. 75
Flexner, S. 6, 56, 139
Flinn, F. B. 39
Flint, J. M. 11, 26
Flood, N. A. 77
Follis, R. H., Jr. 24
Fontaine, J. A. 61
Fooks, W. M. 35
Ford, C. E., Jr. 41
Ford, W. W. 23
Forman, L. L. 68
Forman, S. E. 71
Forney, W. B. 42
Fosnocht, E. B. 35
Fossum, A. 62
Foster, F. 35
Foster, H. B. 16
Foster, R. C. 31

Page.
Foushee, W. L. 16
Foutz, Ch. R. 32
Foutz, Cl. R. 41
Fowler, H. A. 28
Fowler, L. H. 35
Francis, I. H., Jr. 35
Francis, W. W. 35
Frank, E. 16, 31
Frank, S. W. 35
Franklin, E. C. 68
Franklin, F. 50, 59
Fraps, G. S. 16
Fraser, W. R. 71
Frazer, H. M. 84
Fredholm, A. J. A. 16
Freeman, S. H. 51
Frein, P. J. 16
French, J. C. 35
Friedenwald, Harry 74
Friedenwald, Herbert 77
Friedenwald, J. 75
Frothingham, A. L., Jr. 52
Frye, H. W. 83
Fulton, C. L. 77
Fulton, F. T. 11, 24, 81
Futcher, T. B. 7
Gaddess, C. C. 35
Gallagher, J. D. 24, 81
Gallaudet, E. F. 70, 84
Gallaway, W. F. 56, 70, 78
Gane, H. S. 57, 69
Gantt, H. L. 72
Gantz, A. D. 32
Gardner, H. B. 53, 64
Gardner, W. C. 16, 83
Garner, S. 59
Garner, W. W. 17
Garrett, J. W. 21
Garrett, R. 17
Garrison, F. H. 77
Garthe, L. 73
Gassman, H. M. 82
Gates, W. E. 75
Gay, F. P. 28
Geer, H. G. 7, 119, 141
Gemmill, J. R. 35
George, W. H. 32
Geraghty, J. T. 17
Gerry, J. P. 77
Ghio, J. B. 28
Gieske, G. E. 76
Gilchrist, T. C. 7
Gildersleeve, B. L. 3, 43, 44, 87, 89, 90, 95, 96
Gildersleeve, R. C. 76
Gill, A. C. 54
Gill, W. F. 17

Page.
Gillespie, P. ... 32
Gilman, B. I. ... 51
Gilman, D. C. ... 2, 3, 43, 44
Gilman, G. H. ... 55
Gilpin, J. E. ... 8, 66, 77, 126
Gittings, D. S. ... 73
Glascock, C. C. ... 17
Glaser, O. C. ... 39
Glassie, H. H. ... 79
Glenn, J., Jr. ... 74
Glenn, L. C. ... 17
Glenn, W. L. ... 74
Gminder, O. ... 39
Goodman, E. ... 72
Goodnow, H. R. ... 52
Goodwin, C. J. ... 55, 64
Goodwin, E. B. ... 57
Gordon, A., Jr. ... 35
Gordon, D. H. ... 75
Gordon, J. H., Jr. ... 84
Gore, J. W. ... 49
Gorrell, J. H. ... 68
Gorsuch, W. S., Jr. ... 41
Gorton, W. C. L. ... 54, 63, 75
Goto, S. ... 49
Gould, E. R. L. ... 52, 61
Graham, N. D. ... 28, 82
Graham, R. O. ... 63
Grammer, C. E. ... 73
Grant, U. S. ... 56, 67
Grave, C. ... 14
Gray, G. H. ... 81
Gray, G. W. ... 69, 77
Green, D. I. ... 67
Green, E. L. ... 12, 58, 71
Greenbaum, H. S. ... 35
Greenbaum, L. E. ... 79
Greenbaum, M. D. ... 81
Greene, C. W. ... 13
Greene, H. E. ... 5, 44, 100, 101
Greene, J. D., Jr. ... 39
Greenleaf, H. S. ... 80
Grey, W. R. ... 67
Griffin, E. H. ... 3, 43, 44, 114
Griffin, J. J. ... 69
Griffin, J. W. ... 35
Griffin, N. E. ... 17, 81
Griffiss, W. ... 80
Grimes, R. H. ... 35
Grimes, S. B. ... 32
Grimm, K. J. ... 13
Grimsley, G. P. ... 68
Griswold, B. H., Jr. ... 81
Guggenheimer, C. M. ... 85
Guggenheimer, C. S. ... 82
Guggenheimer, J. C. ... 75

Page.
Guggenheimer, S. H. ... 77
Guttmacher, A. ... 17
Guy, D. D. ... 77
Hagen, S. N. ... 17
Haggett, A. S. ... 58, 71
Haight, M. ... 53
Hains, P. C., Jr. ... 84
Haldeman, R. C. ... 17
Hall, C. M. ... 17
Hall, E. H. ... 50, 59
Hall, G. W. ... 28
Hall, J. L. ... 53, 66
Hall, L. B. ... 50
Halsted, G. B. ... 49, 59
Halsted, W. S. ... 4, 44
Hamburger, L. P. ... 11, 72, 80
Hamilton, H. A. ... 14
Hamilton, I. K. ... 83
Hamlin, W. E. ... 32
Hamman, L. V. ... 28
Hammond, W. B., Jr. ... 35
Hancock, F. A. ... 17, 82
Hancock, H. ... 76
Hancock, R. J. ... 81
Handy, W. W. ... 83
Hanna, H. S. ... 36
Harden, A. D. ... 82
Harding, E. C. ... 50
Harding, R. ... 62
Hardy, J. G. ... 13
Harlan, W. B. ... 73
Harriman, H. M., Jr. ... 84
Harris, H. ... 24
Harris, L. M. ... 17
Harris, L. N. ... 32
Harris, N. M. ... 9, 32
Harris, W. A. ... 56, 66
Harrison, C. N. ... 17
Harrison, R. G. ... 8, 49, 56, 68, 77
Harrison, T. P. ... 55, 65
Harry, J. E. ... 54, 63, 75
Harry, P. W. ... 36
Harry, S. C. ... 81
Hart, E. ... 49, 59
Hartman, R. N. ... 68
Hartogensis, B. H. ... 75
Hartwell, E. M. ... 50, 59
Hartzell, J. C. ... 17
Harvey, J. W., Jr. ... 79
Harvey, R. B. ... 81
Harwood, L. ... 82
Harwood, S. P. ... 41
Haskell, L. W. ... 39
Haskins, C. H. ... 64, 75
Hastings, T. W. ... 23, 81
Hastreiter, R. F. ... 28

Page.
Hatfield, J. T. ... 54, 64
Hathaway, A. S. ... 52
Hathaway, J. H. ... 28
Haulenbeek, E. ... 41
Haupt, P. ... 3, 43, 88, 99
Hauser, C. A. ... 81
Haussmann, W. A. ... 57, 69, 79
Haworth, E. ... 63
Hayes, C. W. ... 53, 62
Hayes, S. Q. ... 84
Haynes, G. H. ... 67
Haynes, J. ... 69
Hazelton, J. H. ... 80
Hazen, C. D. ... 67
Head, G. D. ... 32
Heald, E. de F., Jr. ... 14, 82
Healy, W. P. ... 26
Heartz, J. L. ... 32
Hedrick, W. A. ... 62
Heitmuller, G. H. ... 78
Hemmeter, J. C. ... 64
Hemphill, C. R. ... 50
Hench, G. A. ... 54, 63
Henderson, W. E. ... 58, 71
Hendren, S. R. ... 69
Hendrickson, G. L. ... 75
Hendrickson, W. F. ... 26, 82
Henschen, G. N. C. ... 77
Hering, D. W. ... 49
Hering, H. S. ... 6, 119
Herrick, A. B. ... 23
Herrick, F. H. ... 63
Herrick, J. C. ... 17
Herring, A. P. ... 32
Herriott, F. I. ... 67
Herty, C. H. ... 64
Hewlett, A. W. ... 26
Heyman, S. ... 36
Higbee, H. H. ... 69
Hill, G. H. ... 84
Hill, H. D. ... 36
Hill, J. P. ... 36
Hill, M. W. ... 84
Hilles, W. S. ... 77
Hillyer, H. W. ... 52, 61
Hines, G. ... 21
Hinkley, J. ... 74
Hirsh, J. L. ... 22, 79
Hirshberg, L. K. ... 36
Hitchcock, M. S. ... 31
Hite, B. H. ... 56
Hitzrot, J. M. ... 28
Hobbs, W. H. ... 54, 63
Hodge, C. F. ... 54, 63
Hodges, C. S. ... 36
Hodges, G. H. ... 84

Page.
Hodges, J. S. ... 75, 88
Hodges, W. L. ... 41
Hoeing, C. ... 13, 58
Hoen, A. G. ... 8
Hoffman, S. V. ... 12, 56
Hoffmann, F. O. K. ... 75
Hofmann, J. ... 11, 17
Holcomb, W. P. ... 61
Holden, C. C. ... 17, 76
Holden, G. R. ... 28
Hollander, J. H. ... 7, 56, 68, 78, 107, 110
Hollis, F. S. ... 70
Holmes, D. H. ... 56, 67
Holmes, J. H. ... 64
Holmes, W. B. ... 17
Homer, H. L. ... 39
Hopkins, A. J. ... 56, 67
Hopkins, L. N. ... 2
Horn, D. W. ... 17
Horner, J. M. ... 74
Hough, T. ... 56, 67, 75
Howard, C. M. ... 74
Howard, C. McH. ... 78
Howard, D. A. ... 84
Howard, S. F. ... 17
Howe, F. C. ... 66
Howe, F., Jr. ... 17
Howell, W. H. ... 5, 43, 44, 52, 60, 73, 137
Hoye, H. J. ... 24
Hubbard, F. G. ... 62
Hubner, W. R. ... 36
Huff, W. B. ... 17
Hughes, P. M. ... 75
Huguenin, J. ... 14
Huizinga, A. H. ... 52, 64
Hulburt, L. S. ... 6, 44, 68, 116
Hull, W. I. ... 66, 77
Hullihen, W. ... 18
Hume, E. H. ... 11, 29
Humphreys, R. E. ... 18
Humphreys, W. J. ... 57, 71
Hunner, G. L. ... 11, 72
Hunt, R. ... 57, 70, 78
Hunt, R. D. ... 69
Hunter, J. R. ... 69
Hurd, H. M. ... 4, 44
Hussey, G. B. ... 53, 62
Hutchinson, C. T. ... 54, 63, 83
Hutton, G. H., Jr. ... 83
Hutton, R. E. ... 83
Hyde, E. P. ... 36
Hyslop, J. H. ... 53, 62
Iles, M. W. ... 49
Ingle, E. ... 73
Irby, J. R. McD. ... 50
Ishizaka, M. ... 68

Page.
Iyenaga, T. 64
Jackson, L. L., Jr. 80
Jacobs, H. B. 8
Jacques, W. W. 50, 59
Jagemann, H. C. G. 52, 60
James, B. B. 71
James, G. O. 18, 81
James, J. A. 56, 67
James, M. 79
James, R. 41
Jameson, J. F. 51, 60
Jamieson, A. F. 73
Janney, S. S. 81
Jarvis, E. A. 73
Jastrow, J. 53, 61
Jayne, J. L. 83
Jenkins, G. C. 32
Jenkins, M. E. 82
Jenkins, T. A. 68
Jewett, H. J., Jr. 79
Johnson, C. W. L. 56, 70, 78
Johnson, D. S. 12, 49, 58, 71
Johnson, F. H. 82
Johnson, J. H. 73
Johnson, T. W. 79
Johnston, C. 7, 55, 68, 99
Johnston, G. W. 56, 69
Johnston, J. C. 77
Johnston, O. M. 57, 70
Johnston, W. B. 29
Johnstone, M. M. S. 23
Jones, A. D., Jr. 36
Jones, F. R. 12, 70
Jones, H. C. 8, 56, 66, 77, 126
Jones, R. H. 36
Jones, T. D. 36
Jones, T. M. 14
Jones, W. 8, 65, 76
Jones, W. A. 13, 76
Joyner, L. L. 36
Jungbluth, K., Jr. 36
Jungbluth, M. 39
Kalb, C. W. 36
Kalb, J. A. 36
Kane, T. F. 57, 69
Karslake, W. J. 69
Kastle, J. H. 54, 63
Kauffman, B. B. 29
Kaufman, H. 41
Kaufman, H. M. 29, 82
Kaufman, M. 81
Kaye, P. L. 18
Keating, H. W. 78
Keech, E. P., Jr. 78
Keeler, J. E. 73
Keidel, A. 36
Keidel, F. B. 41
Keidel, G. C. 8, 57, 69, 77
Keiser, E. H. 52, 60
Kellogg, J. L. 56, 66
Kellogg, W. C. 26
Kelly, H. A. 4, 44
Kelly, W. D. 32
Kemp, G. T. 53, 61, 74
Kennard, J. A. 36
Kennedy, E. W. 71
Kern, J. W. 18
Kerr, R. C. 41
Kershner, B. M. 41
Keyes, C. R. 55, 66
Killmon, F. A. 82
Kilvert, C. A. 81
Kimball, A. H. 29
Kimball, A. L. 52, 60
Kimball, R. F. 73
Kinard, J. P. 70
King, F. P. 56, 71
King, J. H. 36
King, S. H. 18
King, T. H., Jr. 41
Kingsbury, S. S. 18
Kirk, W. H. 57, 69, 80
Knapp, G. W. 39
Knight, C. H. 82
Knight, W. 10
Knipp, J. E. 82
Knower, H. McE. 12, 49, 57, 70, 78
Knower, W. 78
Knox, J. H. M., Jr. 23
Kohler, E. P. 56, 66
Koyl, C. H. 51
Krafft, H. F. 81
Krager, W. M. 36
Kramps, A. F. 32
Kuersteiner, A. F. 11, 18
Kuhara, M. 50, 60
Kurrelmeyer, H. 36
Kurrelmeyer, W. 13, 82
Kyes, P. 26
Lacy, R. 82
Ladd, L. W. 25
Laessig, J. H., Jr. 75
Laing, G. J. 57, 70
Lamb, A. L. 76
Lambach, F. 32
Lamson, T. 29
Lanahan, H. 82
Land, P. H. 12, 58
Langfeld, M. 23, 80
Lanier, B. B. 78
Lanier, C. D. 76
Lanman, C. R. 9, 50

Page.
Latane, J. H....12, 69, 79
Latimer, C. W.... 81
Lauchheimer, S. H.... 78
Lauer, P. E....56, 66
Lavender, W. R.... 82
Lawrason, L.... 82
Lawson, A. C....53, 68
Lawson, J. W.... 18
Lazear, J. W....9, 77
Lazenby, M.... 39
Learned, M. D....53, 62
Leary, T. M.... 82
Lease, E. B....56, 68
Lecrone, H. R.... 82
Lee, F. S....52, 61
Lee, G. C....11, 18, 107, 110
Lee, J. L. G.... 80
Lees, J. T.... 64
Lefevre, G....9, 49, 57, 70, 78
Lehr, L. C.... 36
Lengfeld, F....54, 63
L'Engle, E. J.... 79
L'Engle, E. M.... 18
Leonard, A. G....11, 18
Levering, J., Jr.... 39
Levermore, C. H....52, 61
Leviss, C.... 57
Levy, W. S.... 82
Lewis, C. S.... 83
Lewis, D. M.... 29
Lewis, E. P.... 69
Lewis, E. S....55, 66
Lewis, W. H....11, 26
Liddell, D. M.... 36
Liebig, G. A., Jr....52, 61, 73
Light, G. U.... 23
Lindheim, N. R.... 36
Lingle, D. J....56, 66
Linn, A. F....54, 66
Linthicum, G. M.... 79
Linthicum, S. B.... 73
Little, C. H.... 18
Little, C. S.... 25
Little, H. W.... 27
Livingood, L. E....8, 57, 139
Loane, J. A.... 74
Lodge, G....53, 61, 74
Loeb, J.... 39
Logie, T....54, 64
Long, M.... 29
Long, O. F....58, 71
Longcope, W. T....29, 82
Loomis, H. B....55, 64
Lord, J. D., Jr.... 74
Lord, J. W....7, 74
Lothrop, E. P.... 79

Page.
Lowe, J. H.... 78
Lowell, E. L.... 27
Luchs, M.... 82
Lucke, H. J.... 36
Luetscher, J. A.... 25
Lupton, F. A.... 28
Lyle, A. G.... 29
Lyman, J. A.... 66
Lynch, F. W.... 25
Lynch, J. C.... 32
Lyon, C. E....18, 82
Lyon, I. P....11, 72
Lyons, W. P.... 74
Macallum, A. B.... 63
Macauley, J. B.... 76
MacCallum, J. B....11, 27
MacCallum, W. G....11, 72
Maccoun, A. E.... 84
Machen, A. W., Jr.... 82
Mackall, L. L.... 37
Mackay, E....57, 70
Mackenzie, A. S....55, 68
Mackenzie, J. N.... 5
MacMechan, A....54, 64
Maddren, W. H.... 29
Madison, J. D.... 23
Magee, C. L.... 25
Magoun, H. W....54, 64
Magruder, E. P.... 81
Magruder, E. W....11, 18
Magruder, H. S.... 79
Maguire, J. D.... 18
Mahon, R. W.... 60
Mahoney, J. R.... 22
Main, J. H. T....56, 66
Mall, F. P....5, 44, 53
Maltbie, W. H....57, 69
Mann, A.... 77
Manning, E. P....56, 68
Manning, H. P....55, 65, 68
Manning, J. M.... 82
Manwaring, W. H.... 29
Marden, C. C....7, 68, 77, 105
Marden, T. B.... 78
Marine, R. E.... 82
Marquand, A....50, 59
Marshall, H. T....23, 81
Marshall, T. H.... 37
Martin, H. N.... 87
Martin, R. J.... 18
Marvell, M. W.... 27
Mather, F. J., Jr....56, 66
Mather, W. T....9, 58, 71
Mathews, E. B....7, 57, 68, 129
Mathews, W.... 32
Mattern, L. W.... 18

Page.
Matzke, J. E. 63
Maynard, G. S. 81, 84
McAll, R. L. 39
McBryde, C. N. 72
McBryde, J. M., Jr. 57, 71
McCabe, T. 54, 63, 75
McCalla, L. P. 31
McCaskell, J. A. 84
McComas, H. C., Jr. 82
McCreary, G. W. 72
McCrosky, J. W. 84
McCulloh, W. W. 77
McDonald, A. 53
McDougall, A. W. 79
McDowell, G. K. 31
McDowell, W. L. 79
McIlwaine, H. R. 67
McInnes, C. R. 18
McIntosh, D. G., Jr. 37
McIver, A., Jr. 84
McKay, C. R. 83
McKee, S. R. 69
McKenzie, R. M. 70
McKeough, E. P. 29
McLane, A., Jr. 75
McLane, J. L. 2, 44
McLane, R. M., Jr. 75
McLaughlin, A. C. 18
McMurrich, J. P. 61
McPherson, J. H. T. 55, 64, 75
McPherson, N. C. 83
McPherson, W. B. 18
Means, D. McG. 50
Meisenhelder, J. E. 18
Mellus, E. L. 12
Meltzer, C. R. 27
Mendenhall, C. E. 13
Menger, L. E. 56, 67
Meriwether, C. 67, 75
Merriam, L. S. 56, 67
Merritt, L. A. 32
Metcalf, M. M. 49, 56, 67
Metcalf, W. V. 64
Metzler, G. F. 65
Meyer, J. F. 18
Mikkelsen, M. A. 56, 66
Milden, A. W. 19
Miles, L. W. 18, 81
Miller, C. W. E. 6, 43, 52, 62, 73
Miller, E. G., Jr. 74
Miller, F. O. 37
Miller, R. D. 37
Miller, W. G. 32
Miller, W. H. 76
Milroy, W. M. 65, 76
Mitchell, J. F. 11, 72, 79

Page.
Mitchell, O. H. 51, 60
Mitchell, S. A. 13
Mitsukuri, K. 10, 51, 60
Mixter, C. W. 79
Moale, P. R. 68, 77
Mohler, J. F. 71
Molinard, W. R. 83
Montgomery, W. A., Jr. 19, 79
Moore, E. S. 29
Moore, G. N. 76
Moore, H. L. 10, 57, 70, 107, 110
Moore, H. M. 25
Moore, J. L. 54, 65
Moore, J. S. 37
Moran, T. F. 57, 69
More, L. T. 57, 69
Morgan, L. C. 73
Morgan, P. S. 37
Morgan, T. H. 49, 55, 64
Morrison, C. J. 41
Morrison, G. C. 78
Morse, H. N. 4, 43, 44, 50, 126
Moses, J. M. 80
Mosher, C. D. 27
Motley, D. E. 19
Motora, Y. 54, 63
Moulton, C. W. 64
Muckenfuss, A. M. 69
Mullen, J., Jr. 84
Mullen, J. M. 37
Mullikin, C. 80
Murkland, P. A. 37
Murray, A. C. 79
Murray, A. T. 54, 64
Murray, D. 10
Murray, D. A. 55, 67
Murray, F. A. G. 32
Murray, J. D. 31
Murray, N. 5, 44
Mustard, W. P. 55, 65
Myers, S. B. 37
Myers, W. S. 19
Myrick, H. G. 27
Nachtrieb, H. F. 52
Nakaseko, R. 19
Neale, L. E. 32
Neill, C. P. 71
Nelson, J. 54, 63
Nesbitt, B. 31
Ness, J. A. 11, 13, 58
Newcomb, S. 3, 43, 87, 116, 117
Newcomer, B. F. 2
Newcomer, W. 77
Newell, L. C. 69
Newhall, B. 55, 65
Newhall, C. W. 80

Page.
Nichols, E. L. ... 51
Nichols, J. L. ... 13, 72
Nicolassen, G. F. ... 51, 60
Nitobe, I. ... 78
Nitze, W. A. ... 13, 81
Nixon, H. B. ... 53, 62
Norris, H. C. ... 42
Norris, H. H. ... 84
Norris, J. F. ... 57, 69, 79
Norris, R. S. ... 19, 71
Northrup, E. F. ... 57, 69
Noyes, F. B ... 80
Noyes, W., Jr. ... 53
Noyes, W. A. ... 60
O'Connell, D. M. ... 23
O'Connor, B. F. ... 51, 60
O'Donovan, J. H. ... 76
Odell, A. ... 27
Oehm, A. A. ... 78
Ogden, P. ... 9, 71
O'Harra, C. C. ... 14
Oliver, E. S. ... 11, 25, 81
Ople, E. L. ... 11, 72, 80
Oppenheimer, A. R. ... 78
Orndorff, W. R. ... 54, 62, 74
Ortmann, A. ... 19
Osborn, H. L. ... 51, 60
Osler, W. ... 4, 44
Osmond, W. H. ... 22
Ota, K. ... 12
Ott, I. ... 50
Ottley, C. W. ... 25
Owsley, P. O. ... 25
Packard, M. S. ... 11, 72
Page, J. ... 73
Page, W. H. ... 50
Paine, C. W. ... 19
Painter, C. F. ... 79
Palmer, A. G. ... 53, 61, 73
Palmer, C. ... 51, 60, 72
Palmer, C. S. ... 53, 62
Palmer, E. L., Jr. ... 39
Palmer, J. H. ... 37
Palmer, N. ... 73
Pancoast, O. B. ... 11, 72
Parham, D. P. ... 19
Parker, H. P. ... 29, 82
Parker, J. D. ... 81
Parks, R. M. ... 66
Passano, L. M. ... 77
Patek, A. J. ... 77
Paton, S. L. ... 8
Patrick, G. T. W. ... 53, 63
Patterson, A. M. ... 19
Patterson, E. L. ... 33
Pattillo, N. A. ... 71

Page.
Pattison, H. ... 88
Patton, F. L. ... 9
Pease, E. M. ... 53
Pease, H. D. ... 57
Pell, A. ... 58, 71
Pender, H. ... 37
Penick, D. A. ... 13
Penniman, G. D. ... 74
Penniman, T. D. ... 19, 79
Penning, O. P. ... 33
Penrose, C. A. ... 11, 72, 80
Penrose, C. B., Jr. ... 80
Peppler, C. W. ... 12, 57, 72, 79
Perkins, C. A. ... 52, 60
Perkins, B. G. ... 23
Perkins, W. H., Jr. ... 74
Perry, H. M. ... 51
Pessels, C. ... 68
Peters, J. G. ... 40
Petrie, G. ... 65
Pettigrew, T. ... 78
Phelps, C. E., Jr. ... 84
Pindell, D. S. ... 81, 84
Piper, J. ... 81
Pleasants, A. W. ... 79
Pleasants, J. ... 75
Pleasants, J. H. ... 2
Pleasants, J. H., Jr. ... 25, 81
Pleasants, R. H., Jr. ... 75
Poetter, G. R. ... 81
Poinier, P. P. ... 50
Poor, C. L. ... 6, 43, 55, 66
Porter, K. ... 24
Post, J. E. H. ... 81
Potts, L. M. ... 19
Powell, H. T. ... 84
Powell, L. P. ... 78
Powell, M. W. ... 40
Poyen-Bellisle, R. de. ... 56
Pratt, J. H. ... 24
Pratt, W. S. ... 51
Prentiss, R. W. ... 51
Preston, E. D. ... 50
Prettyman, C. W. ... 58
Price, H. W. ... 74
Prince, J. D. ... 56, 66
Pullen, F. K. ... 29
Purcell, T. N. de L. ... 40
Purdy, H. L. ... 33
Purnell, J. H. ... 81
Pyle, T. L. ... 37
Rabinovitch, I. E. ... 41
Radcliffe, G. L. P. ... 19, 82
Radford, R. S. ... 69
Ragland, C. D. ... 58, 71
Ramage, B. J. ... 62

Page.
Rambeau, A. 6, 43, 44, 105, 107
Ramsay, R. L. 37
Rand, R. F. 27
Randall, D. R. 54, 62
Randall, W. W. 7, 44, 64, 126
Randolph, A. M., Jr. 79, 84
Randolph, R. L. 7
Rayner, A. W. 42
Reader, F. E. 76
Reber, S. 84
Reed, D. M. 27
Reeder, C. L. 84
Reese, A. L. 83
Reese, A. M. 19, 79
Reese, C. L. 8
Reese, H. M. 14, 82, 126
Reese, R. M. 73
Reeves, J. S. 68
Reeves, W. P. 67, 77
Reid, E. E. 13, 72
Reid, H. F. 6, 43, 44, 52, 61, 73, 129
Reid, L. W. 77
Reizenstein, M. 71, 81
Remsen, C. M. 37
Remsen, I. 3, 43, 44, 87, 90, 126
Renouf, E. 4, 44, 126
Renouf, V. A. 37
Rettger, L. 76
Reutlinger, C. 84
Reymann, L. A. 37
Rhoads, E. 19
Rice, H. J. 50
Richardson, E. G. 73
Richardson, G. M. 55, 65
Rickey, H., Jr. 41
Riley, F. L. 57, 70
Ritchie, A. C. 82
Rittler, W. F. 79
Roberts, B. T., Jr. 74
Roberts, D. E. 76
Roberts, F. 84
Roberts, J. B. 33
Roberts, W. M. 79
Robertson, J. C. 55, 66
Robinson, A. J. 73
Robinson, E. A., Jr. 37
Robinson, G. C. 37
Robinson, J. A. 81
Robinson, R. 77
Roger, F. L. 33
Rogers, C. P. 19
Rogers, R. W. 75
Rolando, H. 73
Roman, V. M. 33
Rosa, E. B. 55, 65
Rosenau, W. 19

Page.
Rosenbaum, L. 82
Rosenheim, S. 11, 25, 81
Rosenthal, L. 76
Ross, C. H. 55, 66
Ross, E. A. 65
Ross, W. L. 37
Roszel, B. M. 56, 70, 77
Rothermel, J. J. 19, 84
Roulston, R. B. 37
Rous, F. P. 37
Routh, J. E. 37
Rowe, R. B. 11, 19
Rowland, A. J. 83
Rowland, H. A. 3, 43, 89, 119
Rowland, W. L. 51
Royce, J. 50, 59
Rubel, M. J. 29
Rushmore, S. 29
Rusk, G. Y. 27, 82
Russ, R. J. 29
Russell, G. W. 19
Russell, H. L. 66
Russell, W. W. 7
Rutter, F. R. 12, 58, 71, 81
Ryland, G. 19
Ryttenberg, M. R. 74
Sabin, F. R. 11, 27
Sadtler, J. G. 77
Saffold, W. B. 13, 72
Sale, L. 73
Salter, J. C. 29
Sampson, J. A. 25
Sanders, H. N. 13
Sands, G. 24
Sanford, E. C. 54, 63
Sato, S. 62
Saunders, A. P. 56, 68
Saunders, C. E. 55, 65
Saunders, F. A. 14
Saussure, R. de. 69
Savage, A. D. 50
Savage, C. A. 19, 81
Sawyer, J. W. 33
Sayre, H. A. 70
Scaife, W. B. 76
Schanfarber, T. 19
Schenck, B. R. 24
Schenck, C. C. 20, 80
Schermerhorn, A. V. R. 38
Schimper, A. F. W. 51
Schloegel, W. E. 21
Schmeckebier, L. F. 20, 82
Schmidt, F. G. G. 57, 70
Scholl, G. B. 38
Schouler, J. 10, 109
Schulz, A. H., Jr. 14, 82

Page.
Schulz, W. F. ... 84
Schunck, J. F. ... 20, 83
Schwab, M. ... 84
Schwatka, J. B. ... 33
Scott, C. C. ... 20
Scott, C. L. ... 33
Scott, J. A. ... 57, 71
Scott, W. A. ... 67
Search, C. J. ... 79
Sedgwick, W. T. ... 51, 59
Senkler, G. E. ... 33
Seth, A. L. ... 38
Sewall, H. ... 50, 59
Shattuck, G. B. ... 9, 58, 71, 129
Shaw, A. ... 61
Shaw, J. E. ... 20, 82
Shefloe, J. S. ... 55, 65
Sherwood, S. ... 6, 43, 44, 65, 107, 110
Shields, T. E. ... 69
Shinn, C. H. ... 74
Shipley, G. ... 12, 71
Shober, W. B. ... 67
Short, H. A. ... 61
Shreeves, B. B. ... 77
Shriver, A. J. ... 79
Shriver, W. P. ... 40
Shuter, H. P. ... 83
Siff, L. ... 20
Sigerfoos, C. P. ... 71
Sihler, C. ... 50, 59
Sihler, E. G. ... 50, 59
Sikes, E. W. ... 71
Silver, J. A. ... 69
Simis, M. P. ... 29
Simmons, W. W. ... 20
Simon, C. E. ... 76
Simonds, T. S. ... 70
Siousat, St. G. L. ... 14, 82
Slagle, R. L. ... 68
Slaughter, M. ... 53, 65
Slemons, J. M. ... 14, 29, 83
Small, A. W. ... 64
Smiley, J. L. ... 79
Smith, A. P. ... 2
Smith, C. A. ... 67
Smith, C. L. ... 54, 64
Smith, E. A. ... 20
Smith, E. S. ... 20
Smith, F. R. ... 8
Smith, F. W. ... 38
Smith, G. O. ... 57, 70
Smith, H. M. ... 29
Smith, K. F. ... 5, 43, 44, 64, 97
Smith, R. M. ... 38
Smith, S. K. ... 79
Smith, S. P. ... 38

Page.
Smith, V. E. ... 38
Smith, W. F. ... 75
Smith, W. L. ... 40
Smull, M. N. ... 40
Smyth, A. H. ... 76
Snavely, C. ... 20
Snavely, G. E. ... 40
Snively, A. B. ... 79
Snowden, S. G. ... 78
Sohon, M. D. ... 70
Sommerville, C. W. ... 20
Sonneborn, S. B. ... 80
Soper, M. A. ... 80
Sowers, W. F. M. ... 27
Sparks, F. E. ... 70, 80
Speirs, A. E. ... 80
Speirs, F. W. ... 70
Spencer, A. C. ... 70
Spencer, C. J. ... 41
Spieker, E. H. ... 5, 43, 44, 51, 60, 72, 96
Spilman, E. A. ... 38
Spragins, S. H. ... 20, 83
Spratt, C. N. ... 29
Squier, G. O. ... 56, 67
Stacey, S. G. ... 56
Staley, M. V. ... 57
Stearns, C. M. ... 38
Stearns, J. S. ... 80
Steele, R. B. ... 55, 65
Steenken, C. D. ... 33, 80
Steensland, H. S. ... 25
Stein, G. ... 30
Stein, L. D. ... 40
Stein, M. D. ... 75
Stein, S. H. ... 81
Steiner, B. C. ... 7, 44, 55, 65, 107, 110
Steiner, H. ... 74
Steiner, W. R. ... 24
Steinfeld, A. L. ... 30, 83
Stephens, C. G. ... 40
Stephens, J. C. ... 41
Stephenson, A. ... 65
Stern, L. ... 80
Stevens, A. R. ... 82
Stevens, D. G., Jr. ... 56, 68, 79
Stevens, L. S. ... 80
Stevens, L. T. ... 52, 73
Stewart, C. M. ... 2
Stewart, C. M., Jr. ... 79
Stewart, G. L. ... 80
Stewart, J., Jr. ... 80
Stewart, R. C. ... 80
Stewart, W. P. ... 38
Stidman, A. G. ... 38
Stoddard, W. B. ... 71
Stokes, G. C., Jr. ... 74

Page.
Stokes, H. N. ... 62, 61
Stokes, J. E. ... 78
Stone, E. A. ... 27
Stone, W. R. ... 25
Stover, G. H. ... 33
Stratton, A. W. ... 57, 69
Stratton, W. E. ... 74
Straus, I. L. ... 78
Straus, T. ... 84
Straus, W. E. ... 38
Stricklen, W. R. ... 73
Strickler, E. H. ... 81
Stringham, W. I. ... 50, 59
Strobel, E. R. ... 25, 81
Strong, R. P. ... 11, 72
Stuart, T. ... 20
Stubbs, M. B. ... 67
Sudler, M. T. ... 11, 20
Suface, G. T. ... 20
Sumwalt, J. W. R. ... 20, 82
Suppan, L. R. A. ... 20
Sutherland, W. R. D. ... 31
Sutphen, M. C. ... 20
Swaine, J. W. ... 41
Swan, J. N. ... 67
Swartz, C. K. ... 76
Swett, C. M. ... 30
Swift, M. I. ... 51, 61
Sykes, F. H. ... 57, 68
Sylvester, J. J. ... 87
Symington, W. S., Jr. ... 69, 79
Taber, H. ... 63
Takaki, M. ... 69
Taliaferro, T. H. ... 57, 70
Talty, A. W. ... 41
Taneyhill, G. L., Jr. ... 38
Tarleton, R. M. ... 76
Tatnall, R. R. ... 69
Taveau, R. ... 38
Taylor, C. D. ... 21
Taylor, J. S. ... 84
Taylor, R. T. ... 77
Taylor, W. H. ... 77
Teillard, X. ... 22
Thayer, A. E. ... 54
Thayer, L. H. ... 27
Thayer, W. S. ... 6
Theobald, S. ... 5
Thieme, G. C. ... 33
Thieme, H. P. ... 71, 80
Thom, J. P., Jr. ... 81
Thom, W. T. ... 11, 12
Thomas, D. H., Jr. ... 80
Thomas, F. McS. ... 84
Thomas, H. M. ... 5
Thomas, J. H. ... 82

Page.
Thomas, R. H. ... 38
Thomas, T. P. ... 69
Thomas, W. J. ... 74
Thomas, W. S. ... 77
Thomayan, H. H. ... 33
Thompson, A. W. ... 33
Thompson, H. D. ... 54
Thompson, H. O. ... 75
Thomson, J. M. ... 83
Thorne, J. ... 70
Tiffany, H. T. ... 73
Tobin, J. S. ... 38
Todd, H. A. ... 61
Todd, R. I. ... 84
Tolman, A. H. ... 53
Tolman, J. ... 33
Tolman, W. H. ... 10, 65
Torrence, R. M. ... 81
Torsch, C. B. ... 82
Tracy, J. V. ... 22
Trippe, J. M. ... 82
Trueman, J. S. ... 45
Trull, G. H. ... 81
Tudor, C. G. ... 81
Tupper, F., Jr. ... 56, 67
Tupper, J. W. ... 70
Tupper, V. L. ... 33
Turnbull, B. ... 38
Turnbull, E. L. ... 80
Turner, A. B. ... 80
Turner, F. J. ... 65
Turner, H. J. ... 20, 80
Tuska, B. S. W. ... 76
Tyson, M. V. ... 81
Uhl, L. L. ... 64
Uhler, H. S. ... 81
Uhler, P. R. ... 6
Ullmann, H. M. ... 67, 77
Ulman, J. N. ... 38
Ulrich, H. L. ... 30
Underhill, A. J. ... 30, 83
Van Dyke, H. ... 10
Van Velzer, C. A. ... 50
Van Vleck, E. B. ... 54
Van Vorst, F. B. ... 50
Vea, M. M. J. ... 79
Verhoeff, F. H. ... 25
Ver Planck, J. de L. ... 40
Vincent, J. M. ... 6, 43, 44, 65, 107, 109
Vorhees, H. ... 51
Vos, B. J. ... 7, 44, 55, 67, 103, 104
Waidner, C. W. ... 13, 82, 83
Walden, E. C. ... 20
Walker, E. E. ... 24
Walker, M. B. ... 30
Walker, M. J. ... 33

Page.
Walker, M. S. 68
Wallis, W. F. 82
Walz, J. L. 9
Walz, W. F. 74
Ward, G. W. 71
Warfield, F. H. 82
Warfield, J. O. 80
Warfield, L. M. 14, 30, 83
Warfield, M. 73
Waring, J. M. S. 84
Warner, A. G. 54, 63
Warner, A. J. 83
Warner, C. L. 20
Warren, F. M. 10, 62
Warren, G. W. 30, 83
Warren, H. A. 77
Warren, Minton. 4, 43, 44, 96, 97
Warren, Mortimer 27
Washburn, C. A. 20
Watase, S. 49, 54, 65
Waters, C. E. 11, 20, 82
Watkins, A. C. 82
Watson, E. L. 79
Watts, C. S. 78
Watts, S. H. 30
Weaver, C. C. 21
Weaver, E. E. 21
Weech, R. W. H. 76
Weedon, W. S. 21
Weeks, S. B. 66
Wegefarth, A. 33
Weglein, D. E. 83
Weida, G. F. 57, 68
Welbourn, J. A. 82
Welch, W. H. 3, 43, 44, 88, 139
Wells, B. W. 52
Wells, E. A. 11, 30
Wells, M. 30
Werber, O. S. 38
West, C. J. 79
West, H. S. 21, 80
West, J. M. 27, 82
Wetzel, W. A. 70
Wharey, J. B. 21
Whealton, L. N. 71
Wheeler, A. W. 51
Wheeler, J. H. 50
Whetham, C. 53
Whitaker, H. A. 82
White, E. L. 76
White, F. 2, 86
White, J., Jr. 55, 66, 76
White, W. D. 84
White, W. K. 40
Whitehead, J. B., Jr. 11, 38, 84
Whitelock, W. W. 78

Page.
Whiteman, S. E. 8, 141
Whitfield, G. T. 81
Whitman, C. O. 51
Whitman, H. S. 40
Whitridge, A. H. 24
Whitridge, W. 78
Whitten, W. M. 21
Wickes, P. L., Jr. 81
Wiegand, H. H. 74, 83
Wiesenfeld, B. 75
Wight, C. 40
Wightman, A. C. 54, 64
Wightman, J. R. 54, 63
Wilcox, F. S. 84
Wilhelm, L. W. 52, 61, 73
Wilkens, F. H. 12, 74
Wilkes, G. 83
Wilkinson, H. B. 33
Willard, J. M. 56
Williams, D. 21, 83
Williams, T. 10
Williams, H. W. 74
Williams, J. W. 6, 75
Williams, L. 75
Williams, W. K. 64, 75
Williams, W. W. 25, 82
Willis, B. 10
Willis, E. W. 76
Willms, J. H. 41
Willoughby, W. F. 76
Willoughby, W. W. 7, 55, 66, 76, 107, 110
Wilson, E. B. 51, 60
Wilson, F. D. 21
Wilson, F. W. 80
Wilson, H. L. 8, 57, 70, 97
Wilson, H. M. 83
Wilson, H. V. 49, 54, 63, 74
Wilson, P. 33
Wilson, R. H. 11, 21, 80
Wilson, W. 10, 53, 62
Wingert, H. F. 76
Wingert, M. 40
Wingert, W. 82
Winne, C. K., Jr. 30, 83
Winslow, J. R. 75
Winslow, N. 38
Winston, J. H. C. 21
Wirt, C. B. 41
Witzenbacher, W. J. 74
Wolf, A. G. 78
Wolfenstein, L. 80
Wolff, F. A., Jr. 56, 67, 78
Wood, C. C. 81
Wood, H. 4, 43, 44, 103, 104
Woodburn, J. A. 55, 65
Woodford, A. B. 66

Page.
Woods, A. C. 75
Woods, C. F., Jr. 72, 79
Wooldridge, P. J. 38
Woolley, P. G. 27
Worthington, T. K. 63
Wright, A. 40
Wright, C. B. 53
Wright, F. B. 21
Wright, H. C., Jr. 41
Wright, J. H. 78

Page.
Wyckoff, S. D. 25
Wyeth, M. C. 31
Yager, A. 61
Yates, L. 25
Young, A. V. E. 50
Young, F. G. 75
Young, J. F. 38
Young, J. W. 84
Zeigler, O. W. 78

INDEX.

Academic Council, 43.
Academic Staff, 3–11, 45.
Admission to graduate courses, 94; to college courses, 166.
Advisers, 166; board of advisers, 44.
American chemical journal, 87.
American journal of mathematics, 87.
American journal of philology, 87.
Anglo-Saxon, courses in, 100.
Annual register, 88.
Annual report, 88.
Applied electricity, proficients in, 83; courses in, 123.
Assistants, 8, 9, 11.
Associate professors, 5, 6.
Associates, 6, 7, 8.
Assyriology, courses in, 99; publications, 87.
Astronomy, courses in, 117.
Attendance on courses. 46.
Attendants on single courses, roll of, 21, 22, 42; fees, 188.

Bachelors of arts, roll of (1879–97), 72–83; see also collegiate instruction.
Bacteriology, courses in, 139.
Biology, courses in, 136; publications, 87.
Botany, courses in, 138; for admission, 171; see also biology.
Bruce fellowship, 12, 49, 182.

Calendar, 91.
Candidates for matriculation, 150, 167; course for, 150; roll of, 39–40; see matriculation.
Caution money, 188.
Chemistry, courses in, 126; for admission, 171.
Collegiate advisers, board of, 44.
Collegiate instruction, plan of, 149; admission to, 166; groups, 155–161; synopsis of groups, 162; schedule of hours, 163; see also special subjects.
Collegiate students, roll of, 34–42.
Comparative philology, courses in, 97.
Courses of instruction, general statements, 93.

Degrees; see doctors of philosophy and bachelors of arts.
Diplomas, fees for, 189.
Doctors of medicine, roll of (1897), 72; see also medical school.
Doctors of philosophy, regulations, 145; roll of (1878–97), 59–72.
Drawing, courses in, 125, 141.

Economics, courses in, 107.
English, courses in, 100; for admission, 169.
Ethics, courses in, 115.
Examinations, dates of, 91.
Expenses, 188.

Faculty, 3–11.
Fees, 188–191.
Fellowships, 179; object of foundation, 179; regulations, 181; present fellows, 13; roll of fellows (1876–97), 49–58.
Fellows by courtesy, roll of, 12; appointment of, 179.
French, courses in, 105; for admission, 169.

Geology, courses in, 129.
German, courses in, 103; for admission, 169.
Government of the university, 43–44.
Graduate instruction, 94.
Graduate students, admission of, 94; roll of, 12–22; places of graduation, 47.
Graduation fees, 189.
Greek, courses in, 95; for admission, 168.
Groups of college courses:
I. (classical), 155.
II. (mathematical-physical), 156,
III. (chemical-biological), 157,
IV. (geological-biological), 158,
V. (Latin-mathematical), 159,
VI. (historical-political) 160,
VII. (modern languages), 161,
Characteristics of, 152.
Synopsis of, 162.
Gymnasium, committee on, 44.

Hebrew, courses in, 99.
Historical statement, 90.
History, courses in, 107; for admission, 170.
History of philosophy, courses in, 114.
Hopkins scholarships, 185.
Hours of college courses, 163.

Institutions in which enrolled students were graduated, 47.

Internes of the Johns Hopkins Hospital, 11.
Instructors and assistants, 8, 9, 11.
Italian, courses in, 107.

Johns Hopkins Hospital, publications, 88; internes, 11.
Johns Hopkins Press, 87–89.
Journal of experimental medicine, 88, 141.

Laboratories, see special subjects.
Laboratory charges, 189.
Latin, courses in, 96; for admission, 168.
Lecturers, 9, 10.
Levering lecturer, 9.
Library, 85; library committee, 44; libraries of Baltimore and Washington, 85; see also special subjects as to the library facilities in the several departments.
Logic, courses in, 114.

Mathematics, courses in, 116; for admission, 168.
Matriculates, roll of, 34–38.
Matriculation, dates of examinations, 91; requirements for, 168; division of examinations, 171.
Medical school, 174; terms of admission, 174; plan of instruction, 176; candidates for the degree of M. D., 23–30; physicians attending courses, 30–33, 178; graduates in, 72; advisory board, 44; fees, 190.
Memoirs from biological laboratory, 87.
Mineralogy, courses in, 131.
Modern language notes, 88, 107.
Morphology, courses in, 136.

Oriental seminary, 97.

Palæontology, courses in, 130.
Pathology, courses in, 139.
Peabody library, 85.
Petrography, courses in, 131.
Philosophical faculty, 94.
Philosophical students, roll of, 12–22.
Philosophy, courses in, 114.
Physical geography, 171.
Physics, courses in, 119.
Physiology, courses in, 137.

Politics, courses in, 107.
Preliminary medical course, (see group III).
President, 2, 3, 43.
Professors and instructors, 3–11, 45.
Proficients in applied electricity, 83–84.
Psychology, courses in, 114.
Publications, 87–89.

Registration fee, 188.
Residences of students, 46.
Romance languages, courses in, 105.

Sanskrit and comparative philology, courses in, 97.
Scholarships, 184; roll of university scholars, 14.
Science for admission, 171; see special subjects
Semitic philology, courses in, 99.
Societies, 90.
Spanish, courses in, 107.
Special students, admission of, 167; roll of, 40.
Students, roll of, 12–42; summary of, 45; classification by residence, 46; places of graduation, 47.
Studies from the biological laboratory, 87; see also biology.
Studies in historical and political science, 87; see also history.
Synopsis of groups, 162.

Tabular statements, 45–91.
Teutonic languages, courses in, 103; see also German.
Treasurer's office, regulations of, 86.
Trustees, 2, 43; committees of, 2.
Tuition fees, 188; charges for attendance on lectures, 188.
Turnbull lecturer, 9.

Undergraduates, roll of, 34–42.
University circulars, 88.
University instruction, plan of, 94.
University scholars (1897–98), 14; regulations, 184.
University studies, board of, 43.

Washington scholarships, 187.
Woodyear scholarships, 187.

Young men's christian association, advisory board, 48.

Zoölogy, courses in, 136.

[Issued May 31, 1898].

THE

JOHNS HOPKINS UNIVERSITY

REGISTER

1898-99

BALTIMORE
THE JOHNS HOPKINS PRESS
1899

THE NEW YORK
PUBLIC LIBRARY
108315
ASTOR, LENOX AND
TILDEN FOUNDATIONS.
1899.

BOARD OF TRUSTEES.

C. Morton Stewart, *President.*

Francis White, *Treasurer.*

Lewis N. Hopkins, *Secretary.*

Lewis N. Hopkins,
Francis White,
C. Morton Stewart,
J. Hall Pleasants,
James L. McLane,
W. Graham Bowdoin,
William T. Dixon,
Benjamin F. Newcomer,
Arthur George Brown,
Eugene Levering,
Richard M. Venable,

The President of the University, *ex officio.*

COMMITTEES.

Executive Committee.

James L. McLane, Arthur George Brown, C. Morton Stewart,
Francis White, Eugene Levering, *ex officio.*
The President of the University, *ex officio.*

Finance Committee.

Francis White, J. Hall Pleasants, C. Morton Stewart,
W. Graham Bowdoin, Benjamin F. Newcomer, *ex officio.*

Building Committee.

J. Hall Pleasants, William T. Dixon, Richard M. Venable,
James L. McLane, Lewis N. Hopkins, C. Morton Stewart,
ex officio.

FACULTY.

Arranged in the several groups in the order of appointment.

DANIEL C. GILMAN, LL. D., *President of the University.*

A. B., Yale College, 1852, and A.M., 1855; LL.D., Harvard University, 1876, St. John's College, 1876. Columbia University, 1887, Yale University, 1889, University of North Carolina, 1889, and Princeton University, 1896; Librarian, Secretary of the Sheffield Scientific School, and Professor of Physical and Political Geography in Yale College, 1856-72; President of the University of California, 1872-75; Corresponding Member of the British Association; Officer of Public Instruction in France; President of the American Oriental Society, 1893-99.

614 Park Ave.

BASIL L. GILDERSLEEVE, PH. D., LL. D., *Professor of Greek.*

A. B., Princeton University, 1849, and A. M., 1852; Ph. D., University of Göttingen, 1853; LL. D., College of William and Mary, 1869, and Harvard University, 1896; Professor of Greek in the University of Virginia, 1856-76; Professor of Latin in the University of Virginia, 1861-65; D. C. L., University of the South, 1884; Hon. Member of the Cambridge Philological Society, of the Philological Syllogos of Constantinople, and of the Archæological Society of Athens; *Editor of the American Journal of Philology.*

1002 N. Calvert St.

IRA REMSEN, M. D., PH. D., LL. D., *Professor of Chemistry, and Director of the Chemical Laboratory.* 12 E. Biddle St.

A. B., College of the City of New York, 1865; M. D., College of Physicians and Surgeons, N. Y., 1867; Ph. D., University of Göttingen, 1870; LL. D., Columbia University, 1893, and Princeton University, 1896; Professor of Chemistry in Williams College, 1872-76, and previously Assistant in Chemistry in the University of Tübingen; Corresponding Member of the British Association; Honorary Member, Pharmaceutical Society of Great Britain; Foreign Member, Chemical Society of London; *Editor of the American Chemical Journal; Secretary of the Academic Council.*

HENRY A. ROWLAND, PH. D., LL. D., *Professor of Physics, and Director of the Physical Laboratory.* 915 Cathedral St.

C. E., Rensselaer Polytechnic Institute, 1870; Assistant Professor in the same, 1872-75; Ph. D. (Hon.), Johns Hopkins University, 1880; LL. D., Yale University, 1895, and Princeton University, 1896; Rumford Medalist, American Academy of Sciences; Honorary Member of the Physical Society of London, of the French Physical Society, of the Groenian Academy of Natural Sciences, Sicily, and of the Literary and Philosophical Society of Manchester; Corresponding Member of the British Association and of the Royal Society of Göttingen; Member of the Cambridge (Eng.) Philosophical Society; Foreign Member of the Royal Society of London, of the Stockholm Academy of Sciences, of the Reale Accademia dei Lincei, Rome, of the Italian Society of Spectroscopists; Foreign Correspondent, French Academy of Sciences; Officer of the Legion of Honor of France; Hon. Fellow of the Royal Society of Edinburgh.

PAUL HAUPT, PH. D., *Professor of the Semitic Languages.* 2315 Linden Av.

Gymnasium Augustum, Görlitz, 1876; Ph. D., University of Leipsic, 1878; *Privat-docent* in the University of Göttingen, 1880, and Professor of Assyriology in the same, 1883; Honorary Curator of the Collection of Oriental Antiquities in the U. S. National Museum, Washington, D. C.; *Co-editor of The Assyriological Library, and of Contributions to Assyriology and Comparative Semitic Philology; Editor of the Sacred Books of the Old Testament.*

WILLIAM H. WELCH, M. D., LL. D., *Professor of Pathology.* 935 St. Paul St.

A. B., Yale College, 1870; M. D., College of Physicians and Surgeons (N. Y.), 1875; LL. D., Western Reserve University, 1894, and Yale, 1896; M. D. (Hon.), University of Pennsylvania, 1894; Professor of Pathological Anatomy and General Pathology in the Bellevue Hospital Medical College, 1879-84; President of the Medical and Chirurgical Faculty of Maryland, 1891-92; Dean of the Johns Hopkins Medical School, 1889-98; *Pathologist to the Johns Hopkins Hospital; Editor of the Journal of Experimental Medicine.*

SIMON NEWCOMB, PH. D., LL. D., *Professor of Mathematics and Astronomy.*

S. B., Harvard University, 1858; LL. D., Columbian University, 1874, Yale, 1875, Harvard, 1884, Columbia, 1887, Edinburgh, 1891, Cambridge, 1896, Glasgow, 1896, and Princeton, 1896; Ph. D. (Hon.), University of Leyden, 1875; Ph. D. (Hon.), University of Heidelberg, 1886; Dr. Sc., University of Dublin, 1892; Dr. Nat. Phil., University of Padua, 1892; Senior Professor of Mathematics, U. S. Navy, and Superintendent of the American Ephemeris and Nautical Almanac, 1877-97; Associate, Royal Astronomical Society, 1873; Corresponding Member, Institute of France, 1874, and Foreign Associate, 1896; Foreign Member of the Royal Society of London and of the Reale Accademia dei Lincei, Rome; Member of the Academies in Berlin, St. Petersburg, Munich, Stockholm, Amsterdam, etc.; Copley Medalist, Royal Society, London, 1890; Honorary Member, Royal Institution of Great Britain; Officer of the Legion of Honor of France; Editor of the American Journal of Mathematics, 1884-94.

1620 P St., Washington.

EDWARD H. GRIFFIN, D. D., LL. D., *Professor of the History of Philosophy, and Dean of the College Faculty.* 1027 N. Calvert St.

A. B., Williams College, 1862, and A. M., 1865; Union Theological Seminary, New York, 1867; D. D., Amherst College, 1880; LL. D., Princeton University, 1888; Professor of Latin in Williams College, 1872-81, Professor of Rhetoric, 1881-86, and Mark Hopkins Professor of Intellectual and Moral Philosophy, 1886-89.

WILLIAM OSLER, M. D., LL. D., D. C. L., *Professor of the Principles and Practice of Medicine, and Dean of the Medical Faculty.* 1 W. Franklin St.

M. D., McGill University, 1872, and LL. D., 1896; LL. D., Aberdeen, and D. C. L., Edinburgh, 1896; Fellow of the Royal Society of London; Fellow of the Royal College of Physicians, London; Professor of the Institutes of Medicine, McGill University, Montreal, 1874–84; Professor of Clinical Medicine, University of Pennsylvania, 1884–89; *Physician in Chief to the Johns Hopkins Hospital; Associate Editor of the Journal of Experimental Medicine.*

HENRY M. HURD, M. D., LL. D., *Professor of Psychiatry.*

A. B., University of Michigan, 1863, M. D., 1866, A. M., 1870, and LL. D., 1896; Superintendent of the Eastern Michigan Asylum, 1878–89; *Editor of the Johns Hopkins Hospital Bulletin and of the Johns Hopkins Hospital Reports; Editor of the American Journal of Insanity; Superintendent of the Johns Hopkins Hospital.* The Johns Hopkins Hospital.

HOWARD A. KELLY, A. M., M. D., *Professor of Gynecology.*

A. B., University of Pennsylvania, 1877, and M. D., 1882; Associate Professor of Obstetrics, University of Pennsylvania, 1888–89; *Gynecologist to the Johns Hopkins Hospital.* 1406 Eutaw Place.

HERBERT B. ADAMS, PH. D., LL. D., *Professor of American and Institutional History.* 1025 Cathedral St.

A. B., Amherst College, 1872; Ph. D., University of Heidelberg, 1876; LL. D., University of Alabama, 1891; Fellow of the Johns Hopkins University, 1876–78; *Editor of the Studies in Historical and Political Science.*

WILLIAM K. BROOKS, PH. D., LL. D., *Professor of Zoölogy, and Director of the Chesapeake Zoölogical Laboratory.* Lake Roland.

A. B., Williams College, 1870, and LL. D., 1893; Ph. D., Harvard University, 1875; Fellow of the Royal Microscopical Society of London; *Editor of the Memoirs from the Biological Laboratory.*

MAURICE BLOOMFIELD, PH. D., LL. D., *Professor of Sanskrit and Comparative Philology.* 861 Park Av.

A. M., Furman University, 1877; Fellow, Johns Hopkins University, 1878–79, and Ph. D., 1879; LL. D., Princeton University, 1896; Foreign Member, Royal Bohemian Society in Prague.

THOMAS CRAIG, PH. D., *Professor of Pure Mathematics.* 1822 St. Paul St.

C. E., Lafayette College, 1875; Fellow, Johns Hopkins University, 1876–79, and Ph. D., 1878; *Editor of the American Journal of Mathematics.*

A. MARSHALL ELLIOTT, PH. D., LL. D., *Professor of the Romance Languages.*

A. B., Haverford College, 1866, and A. M., 1878; A. B., Harvard University, 1868; Ph. D. (Hon.), Princeton University, 1877; LL. D., Wake Forest College, 1891; *Editor of Modern Language Notes.* 935 N. Calvert St.

WILLIAM S. HALSTED, M. D., *Professor of Surgery.* 1201 Eutaw Place.

A. B., Yale College, 1874; M. D., College of Physicians and Surgeons (New York), 1877; formerly Attending Surgeon to the Presbyterian and Bellevue Hospitals, New York; *Surgeon in Chief to the Johns Hopkins Hospital.*

HARMON N. MORSE, PH. D., *Professor of Analytical Chemistry, and Sub-Director of the Chemical Laboratory.* 726 Reservoir St.

A. B., Amherst College, 1873; Ph. D., University of Göttingen, 1875; Instructor in Chemistry, Amherst College, 1875–76.

MINTON WARREN, PH. D., *Professor of Latin.* 1503 Madison Av.

A. B., Tufts College, 1870; Ph. D., University of Strassburg, 1879; Director, American School of Classical Studies in Rome, 1896–97.

HENRY WOOD, PH. D., *Professor of German.* 109 W. North Av.

A. B., Haverford College, 1869; Ph. D., University of Leipsic, 1879; President of the American Folk-Lore Society, 1896.

EDWARD RENOUF, PH. D., *Collegiate Professor of Chemistry, and Acting Director of the Gymnasium.* 416 W. Hoffman St.

Ph. D., University of Freiburg, 1880; Assistant in Chemistry in the University of Munich, 1880–85.

JOHN J. ABEL, M. D., *Professor of Pharmacology.* 1604 Bolton St.

Ph. B., University of Michigan, 1883; M. D., University of Strassburg, 1888; Professor of Materia Medica and Therapeutics, University of Michigan, 1891–93; *Associate Editor of the Journal of Experimental Medicine.*

WILLIAM H. HOWELL, PH. D., M. D., *Professor of Physiology.*

A. B., Johns Hopkins University, 1881, Fellow, 1883–84, and Ph. D., 1884; M. D., University of Michigan, 1890; Lecturer and Professor of Physiology and Histology, University of Michigan, 1889–92; Associate Professor of Physiology, Harvard University, 1892–93; *Associate Editor of the Journal of Physiology; Associate Editor of the Journal of Experimental Medicine.*

232 W. Lanvale St.

FRANKLIN P. MALL, M. D., *Professor of Anatomy.* 200 E. Preston St.

M. D., University of Michigan, 1883; Fellow, Johns Hopkins University, 1886–88, and Assistant in Pathology, 1888–89; Adjunct Professor of Anatomy, Clark University, 1889–92; Professor of Anatomy, University of Chicago, 1892–93.

JAMES W. BRIGHT, PH. D., *Professor of English Philology.* 819 Park Av.

A. B., Lafayette College, 1877; Fellow, Johns Hopkins University, 1880–82, and Ph. D., 1882; Hon. Secretary for America (South and West) of the Early English Text Society; *Editor of the Publications of the Modern Language Association of America; Associate Editor of the Journal of Germanic Philology; Associate Editor of Modern Language Notes.*

WILLIAM HAND BROWNE, M. D., *Professor of English Literature.*

M. D., University of Maryland, 1850; Librarian and Associate, 1879–91. Sherwood.

HERBERT EVELETH GREENE, PH. D., *Collegiate Professor of English.*

A. B., Harvard University, 1881, A. M., 1884, and Ph. D., 1888; Professor of English in Wells College, 1891–93.

1019 St. Paul St.

WM. BULLOCK CLARK, PH. D., *Professor of Organic Geology, and Director of the Geological Laboratory.* 8 E. Read St.

A. B., Amherst College, 1884; Ph. D., University of Munich, 1887; *Director of the Maryland State Weather Service; State Geologist of Maryland.*

JOSEPH S. AMES, PH. D., *Professor of Physics, and Sub-Director of the Physical Laboratory.* The Albany.

A. B., Johns Hopkins University, 1886, Fellow, 1887–88, and Ph. D., 1890; *Assistant Editor of the Astrophysical Journal.*

SIMON FLEXNER, M. D., *Professor of Pathological Anatomy.*

M. D., University of Louisville, 1889; Fellow, Johns Hopkins University, 1891–92; *Resident Pathologist, Johns Hopkins Hospital.*

Johns Hopkins Hospital.

WILLIAM D. BOOKER, M. D., *Clinical Professor of Pediatrics.* 851 Park Av.

M. D., Univ. of Virginia, 1867; *Associate in Pediatrics, Johns Hopkins Hospital and Dispensary.*

JOHN N. MACKENZIE, M. D., *Clinical Professor of Laryngology and Rhinology.*

M. D., Univ. of Virginia, 1876, and New York Univ., 1877; *Laryngologist, Johns Hopkins Hospital and Dispensary.*

879 Park Av.

SAMUEL THEOBALD, M. D., *Clinical Professor of Ophthalmology and Otology.*

M. D., Univ. of Maryland, 1867; *Ophthalmic and Aural Surgeon, Johns Hopkins Hospital and Dispensary.*

304 W. Monument St.

HENRY M. THOMAS, M. D., *Clinical Professor of Neurology.*

M. D., University of Maryland, 1884; *Associate, Johns Hopkins Hospital and Dispensary.*

1228 Madison Ave.

J. WILLIAMS LORD, M. D., *Clinical Professor of Dermatology and Instructor in Anatomy.* 345 N. Charles St.

A. B., Johns Hopkins University, 1884; M. D., University of Pennsylvania, 1887; *Dermatologist, Johns Hopkins Hospital and Dispensary.*

T. CASPAR GILCHRIST, M. B., *Clinical Professor of Dermatology.*

M. B., University of London, 1886; M. R. C. S., London; *Dermatologist, Johns Hopkins Hospital and Dispensary.*

2118 Mt. Royal Terrace.

HENRY J. BERKLEY, M. D., *Clinical Professor of Psychiatry.* 1303 Park Av.

M. D., University of Maryland, 1881; Attending Physician, Bay View Asylum.

NICHOLAS MURRAY, A. B., LL. B., *Librarian.* 621 St. Paul St.

A. B., Williams College, 1862; LL. B., Columbia University, 1866.

EDWARD H. SPIEKER, PH. D., *Associate Professor of Greek and Latin.*
A. B., Johns Hopkins University, 1879, Fellow, 1880-82, and Ph. D., 1882; *Secretary of the Board of Collegiate Advisers.* 915 Edmondson Av.

LOUIS DUNCAN, PH. D., *Associate Professor of Electricity.* [Absent.]
U. S. Naval Academy, 1880; Ensign, U. S. Navy, 1883-86; Ph. D., Johns Hopkins University, 1885; President of the American Institute of Electrical Engineers, 1895.

CARY T. HUTCHINSON, PH. D., *Acting Associate Professor of Electricity.*
Ph. B., Washington University, 1886; Fellow, Johns Hopkins University, 1888-89, and Ph. D., 1889. Maryland Club.

ETHAN A. ANDREWS, PH. D., *Associate Professor of Biology.* 821 St. Paul St.
Ph. B., Yale College, 1881; Fellow, Johns Hopkins University, 1884-86, and Ph. D., 1887.

KIRBY F. SMITH, PH. D., *Associate Professor of Latin.* 1301 Maryland Av.
A. B., University of Vermont, 1884; Ph. D., Johns Hopkins University, 1889.

ADOLPH RAMBEAU, PH. D., *Associate Professor of the Romance Languages.*
Wittenberg Gymnasium, 1871; Ph. D., University of Marburg, 1877; Professor in the Hamburg Gymnasium, 1888-92. 311 Dolphin St.

CHARLES L. POOR, PH. D., *Associate Professor of Astronomy.*
S. B., College of the City of New York, 1886, and M. S., 1890; Fellow, Johns Hopkins University, 1889-90, and Ph. D., 1892; Instructor in the College of the City of New York, 1890-91. 1312 Eutaw Place.

SIDNEY SHERWOOD, PH. D., *Associate Professor of Political Economy.*
A. B., Princeton University, 1879; Ph. D., Johns Hopkins University, 1891; Instructor in Finance, University of Pennsylvania, 1891-92. Roland Park.

JOHN MARTIN VINCENT, PH. D., *Associate Professor of History.*
A. B., Oberlin College, 1883, and A. M., 1886; Ph. D., Johns Hopkins University, 1890. 1915 Park Av.

HARRY FIELDING REID, PH. D., *Associate Professor of Geological Physics.*
A. B., Johns Hopkins University, 1880, Fellow, 1882, and Ph. D., 1885; Professor of Mathematics (1886-89) and of Physics (1889-94), Case School of Applied Science; Associate Professor of Physical Geology, University of Chicago, 1896-97. 608 Cathedral St.

J. WHITRIDGE WILLIAMS, M. D., *Associate Professor of Obstetrics.*
A. B., Johns Hopkins University, 1886; M. D., University of Maryland, 1888; *Associate in Obstetrics, Johns Hopkins Hospital.* 1128 Cathedral St.

LEWELLYS F. BARKER, M. B., *Associate Professor of Anatomy.*
M. B., University of Toronto, 1890; Fellow, Johns Hopkins University, 1892-94; *Assistant Resident Pathologist, Johns Hopkins Hospital.* Johns Hopkins Hospital.

WILLIAM S. THAYER, M. D., *Associate Professor of Medicine.*
A. B., Harvard University, 1885, and M. D., 1889; late Resident Physician, Johns Hopkins Hospital. 3 W. Franklin St.

JOHN M. T. FINNEY, M. D., *Associate Professor of Surgery.*
A. B., Princeton University, 1884; M. D., Harvard University, 1888; *Associate in Surgery, Johns Hopkins Hospital.* 923 N. Charles St.

LORRAIN S. HULBURT, PH. D., *Collegiate Professor of Mathematics.*
A. B., University of Wisconsin, 1883, and A. M., 1888; Professor of Mathematics, University of South Dakota, 1887-91; Fellow, Clark University, 1891-92; Ph. D., Johns Hopkins University, 1894. 1425 Bolton St.

C. W. EMIL MILLER, PH. D., *Associate Professor of Greek.*
A. B., Johns Hopkins University, 1882, Fellow, 1883-85, and Ph. D., 1886. 2 Irvington Terrace.

BERT J. VOS, PH. D., *Associate Professor of German.* 2118 St. Paul St.
A. B., University of Michigan, 1888; Fellow, Johns Hopkins University, 1889-91, and Ph. D., 1892; Instructor in the University of Chicago, 1892-93.

PHILIP R. UHLER, *Associate in Natural History.* 254 W. Hoffman St.
Provost and Librarian of the Peabody Institute; President of the Maryland Academy of Sciences.

HERMANN S. HERING, M. E., *Associate in Electrical Engineering.*
S. B., University of Pennsylvania, 1885, and M. E., 1886; Instructor in the Philadelphia Manual Training School, 1886-87, and Professor of Mechanics and Applied Electricity, 1887-91.
1810 St. Paul St.

GEORGE P. DREYER, PH. D., *Associate in Biology.* 137 Jackson Place.
A. B., Johns Hopkins University, 1887, Fellow, 1889-90, and Ph. D., 1890.

CHRISTOPHER JOHNSTON, JR., PH. D., *Associate in the Semitic Languages.*
B. Litt., University of Virginia, 1876, A. B., 1878, and A. M., 1879; M. D., University of Maryland, 1880; Fellow, Johns Hopkins University, 1889-91, and Ph. D., 1894. 709 St. Paul St.

BERNARD C. STEINER, PH. D., *Associate in History.* 1038 N. Eutaw St.
A. B., Yale University, 1888, and A. M., 1890; Fellow, Johns Hopkins University, 1890-91, and Ph. D., 1891; LL. B., University of Maryland, 1894; Instructor in Williams College, 1891-92; Dean of the Law School, and Professor of Constitutional Law, Baltimore University; Librarian, Enoch Pratt Free Library.

HERBERT G. GEER, M. E., *Associate in Mechanical Engineering.*
M. E., Cornell University, 1893. 532 E. Twenty-second St.

EDWARD B. MATHEWS, PH. D., *Associate in Mineralogy.* 1005 N. Charles St.
A. B., Colby University, 1891; Fellow, Johns Hopkins University, 1893-94, and Ph. D., 1894.

WILLIAM W. RUSSELL, M. D., *Associate in Gynecology.* 1415 Eutaw Place.
M. D., University of Pennsylvania, 1890; Resident Gynecologist, Johns Hopkins Hospital, 1894-95.

ROBERT L. RANDOLPH, M. D., *Associate in Ophthalmology and Otology.*
M. D., University of Maryland, 1884; *Assistant Ophthalmic and Aural Surgeon, Johns Hopkins Hospital and Dispensary.* 816 Park Av.

JACOB H. HOLLANDER, PH. D., *Associate in Economics.* 2011 Eutaw Place.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1894.

WESTEL W. WILLOUGHBY, PH. D., *Associate in Political Science.*
A. B., Johns Hopkins University, 1888, Fellow, 1890-91, and Ph. D., 1891. Roland Park.

THOMAS B. FUTCHER, M. B., *Associate in Medicine.* Johns Hopkins Hospital.
M. B., University of Toronto, 1893; *Resident Physician, Johns Hopkins Hospital.*

WILLIAM J. A. BLISS, PH. D., *Associate in Physics.* 1017 St. Paul St.
A. B., Harvard University, 1888; Ph. D., Johns Hopkins University, 1894.

C. CARROLL MARDEN, PH. D., *Associate in Romance Languages.*
A. B., Johns Hopkins University, 1889, and Ph. D., 1894; Instructor, University of Michigan, 1890-91.
1911 Park Ave.

JOSEPH C. BLOODGOOD, M. D., *Associate in Surgery.*
S. B., University of Wisconsin, 1888; M. D., University of Pennsylvania, 1891; Resident Surgeon, Johns Hopkins Hospital, 1893-97.
Johns Hopkins Hospital.

THOMAS S. CULLEN, M. B., *Associate in Gynecology.* 3 W. Preston St.
M. B., University of Toronto, 1890; Resident Gynecologist, Johns Hopkins Hospital, 1896-97.

ROSS G. HARRISON, PH. D., *Associate in Anatomy.* 2018 Park Av.
A. B., Johns Hopkins University, 1889, Fellow, 1893-94, Ph. D., 1894, and Bruce Fellow, 1894; Lecturer, Bryn Mawr College, 1894-95.

REID HUNT, PH. D., M. D., *Associate in Pharmacology.* 1314 McCulloh St.
A. B., Johns Hopkins University, 1891, Fellow, 1894-96, and Ph. D., 1896; M. D., College of Physicians and Surgeons (Balt.), 1896; Tutor in Physiology, Columbia University, 1896-98.

THOMAS S. BAKER, PH. D., *Associate in German.* 1202 Mt. Royal Av.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1895.

JAMES C. BALLAGH, PH. D., *Associate in History.* 1915 St. Paul St.
A. B., Johns Hopkins University, 1894, and Ph. D., 1896.

ABRAHAM COHEN, PH. D., *Associate in Mathematics.* 1412 Linden Av.
A. B., Johns Hopkins University, 1891, Fellow, 1893-94, and Ph. D., 1894.

J. ELLIOTT GILPIN, PH. D., *Associate in Chemistry.* 1127 Madison Av.
A. B., Johns Hopkins University, 1889, and Ph. D., 1892.

HARRY C. JONES, PH. D., *Associate in Physical Chemistry.*
A. B., Johns Hopkins University, 1889, Fellow, 1891-92, and Ph. D., 1892. 1128 McCulloh St.

GEORGE C. KEIDEL, PH. D., *Associate in Romance Languages.* Catonsville.
A. B., Johns Hopkins University, 1889, Fellow, 1893-95, and Ph. D., 1895.

JOHN G. CLARK, M. D., *Associate in Gynecology.* 1415 Eutaw Place.
M. D., University of Pennsylvania, 1891; Resident Gynecologist, Johns Hopkins Hospital, 1894-96.

S. EDWIN WHITEMAN, *Instructor in Drawing.* 855 N. Eutaw St.
École des Beaux-Arts, Paris.

J. BASCOM CRENSHAW, PH. D., *Instructor in Physical Culture.* Gymnasium.
A. M., Randolph-Macon College, 1881; Ph. D., Johns Hopkins University, 1893.

MELVIN BRANDOW, A. B., *Assistant Librarian.* 2714 Parkwood Av.
A. B., Rutgers College, 1888; Fellow, Johns Hopkins University, 1892-93.

ALBERT C. CRAWFORD, M. D., *Assistant in Pharmacology.* 1009 N. Caroline St.
M. D., College of Physicians and Surgeons (Balt.), 1893.

HARRY L. WILSON, PH. D., *Instructor in Latin.* 1113 Bolton St.
A. B., Queen's University (Ont.), 1887, and A. M., 1888; Fellow, Johns Hopkins University, 1895, and Ph. D., 1896.

GEORGE W. DOBBIN, M. D., *Assistant in Obstetrics.* Johns Hopkins Hospital.
A. B., Johns Hopkins University, 1891; M. D., University of Maryland, 1894; *Assistant Obstetrician, Johns Hopkins Hospital.*

FRANK R. SMITH, M. D., *Instructor in Medicine.* 1126 Cathedral St.
A. M., University of Cambridge (England), 1882; M. D., University of Maryland, 1891; *Chief of Medical Clinic, Johns Hopkins Dispensary.*

SYDNEY M. CONE, M. D., *Assistant in Surgical Pathology.* 1616 Eutaw Place.
A. B., Johns Hopkins University, 1890; M. D., University of Pennsylvania, 1893; Assistant Resident Surgeon, Johns Hopkins Hospital, 1894-95.

WALTER JONES, PH. D., *Assistant in Physiological Chemistry and Toxicology.*
A. B., Johns Hopkins University, 1888, and Ph. D., 1891; Professor of Analytical Chemistry, Purdue University, 1893-95. 2305 N. Charles St.

CHARLES L. REESE, PH. D., *Assistant in Chemistry.* 1801 Linden Av.
Ph. D., University of Heidelberg, 1886.

H. BARTON JACOBS, M. D., *Instructor in Medicine.* 3 W. Franklin St.
A. B., Harvard University, 1883, M. D., 1887, and Assistant in Botany, 1883-85.

STEWART L. PATON, M. D., *Assistant in Clinical Neurology.*
A. B., Princeton University, 1886, and A. M., 1889; M. D., College of Physicians and Surgeons (N. Y.), 1889; Assistant Attending Physician, Bay View Asylum. 58 W. Biddle St.

EDWARD C. ARMSTRONG, PH. D., *Instructor in Romance Languages.*
A. B., Randolph-Macon College, 1890, and A. M., 1894; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897. Roland Park.

CHARLES R. BARDEEN, M. D., *Assistant in Anatomy.* 412 N. Broadway.
A. B., Harvard University, 1893; M. D., Johns Hopkins University, 1897.

N. ERNEST DORSEY, PH. D., *Assistant in Physics.* 1221 Druid Hill Av.
A. B., Johns Hopkins University, 1893, Fellow, 1896-97, and Ph. D., 1897.

OLIVER L. FASSIG, S. B., *Instructor in Climatology.* 1534 Mt. Royal Av.
S. B., Ohio State University, 1892; U. S. Weather Bureau.

PHILIP OGDEN, PH. D., *Instructor in Romance Languages.* 1314 Park Av.
A. B., Cornell University, 1891; Ph. D., Johns Hopkins University, 1897.

GEORGE B. SHATTUCK, PH. D., *Instructor in Physiographic Geology.*
S. B., Amherst College, 1892; Fellow, Johns Hopkins University, 1896-97, and Ph. D., 1897.
The Arundel.

HARVEY W. CUSHING, M. D., *Assistant in Surgery.*
A. B., Yale University, 1891; A. M. and M. D., Harvard University, 1895; *Resident Surgeon, Johns Hopkins Hospital.*
Johns Hopkins Hospital.

NORMAN MACL. HARRIS, M. B., *Assistant in Bacteriology.*
M. B., University of Toronto, 1894.
1020 N. Broadway.

JESSE W. LAZEAR, M. D., *Assistant in Clinical Microscopy.*
A. B., Johns Hopkins University, 1889; M. D., College of Physicians and Surgeons (N. Y.), 1892; Assistant Resident Physician, Johns Hopkins Hospital, 1895-96.
835 Park Av.

J. LEE WALZ, *Assistant in Pharmacy.* 743 Dolphin St.
Ph. G., Maryland College of Pharmacy, 1888; *Pharmacist, Johns Hopkins Hospital.*

HUGH H. YOUNG, M. D., *Instructor in Genito-Urinary Diseases.*
A. B. and A. M., University of Virginia, 1893, and M. D., 1894; *Assistant Resident Surgeon, Johns Hopkins Hospital.*
Johns Hopkins Hospital.

ELIZABETH HURDON, M. D., *Assistant in Gynecology.* 4 E. Preston St.
M. D., Trinity University (Toronto), 1895; *Assistant in Gynecology, Johns Hopkins Hospital.*

HENRY O. REIK, M. D., *Assistant in Ophthalmology and Otology.*
M. D., University of Maryland, 1891; *Assistant in Ophthalmology and Otology, Johns Hopkins Hospital.*
5 W. Preston St.

OTTO G. RAMSEY, M. D., *Instructor in Gynecology.*
M. D., University of Virginia, 1891; Resident Gynecologist, Johns Hopkins Hospital, 1897-98.

DUNCAN S. JOHNSON, PH. D., *Assistant in Botany.* 930 Madison Av.
S. B., Wesleyan University, 1892; Fellow, Johns Hopkins University, 1896-97, Ph. D., 1897, and Bruce Fellow, 1897-98.

GUY C. LEE, PH. D., *Instructor in Elocution and History.* 1707 Bolton St.
LL. B., University of North Carolina, 1894; A. B. and LL. M., Dickinson College, 1895; Fellow, Johns Hopkins University, 1897-98, and Ph. D., 1898.

WILLIAM G. MACCALLUM, M. D., *Assistant in Pathology.*
A. B., University of Toronto, 1894; M. D., Johns Hopkins University, 1897.
Johns Hopkins Hospital.

CHARLES W. WAIDNER, PH. D., *Assistant in Physics.* Wetheredville.
A. B., Johns Hopkins University, 1896, Fellow, 1897-98, and Ph. D., 1898.

JOHN B. WHITEHEAD, A. B., *Instructor in Electricity.* 2000 Maryland Av.
A. B., Johns Hopkins University, 1898.

RICHARD H. WILSON, PH. D., *Instructor in Romance Languages.*
A. B., Johns Hopkins University, 1892, and Ph. D., 1898. 2617 Pennsylvania Av.

GILMAN A. DREW, PH. D., *Assistant in Zoology.* 502 W. Lafayette Av.
S. B., Iowa State University, 1890; Fellow, Johns Hopkins University, 1897-98, Ph. D., 1898, and Bruce Fellow, 1898.

LOUIS E. JEWELL, *Assistant in Practical Photography and Spectroscopy.*
1013 McCulloh St.

LECTURERS, 1898–99.

On the Levering Foundation.

Rev. Professor WILLIAM N. CLARKE, D. D., of Colgate University.
Three lectures on *The Christian Heritage.*

On the Wehrhane Foundation.

Professor KUNO FRANCKE, PH. D., of Harvard University.
Six lectures on *German and Flemish Art.*

History of Religions.

Rev. Professor KARL BUDDE, D. D., of the University of Strasburg.
Six lectures on *The Religion of Israel from the earliest times to the Exile.*

Lecturers and Readers before different departments of the University.

Medical School.

ALEXANDER C. ABBOTT, M. D., Professor of Hygiene and Director of the Laboratory of Hygiene, University of Pennsylvania.

JOHN S. BILLINGS, M. D., LL. D., Surgeon, U. S. Army, and late Librarian of the Surgeon-General's Office; Director of the New York Public Library.

ROBERT FLETCHER, M. D., M. R. C. S. (Eng.), Surgeon, U. S. Army.

CH. WARDELL STILES, PH. D., Zoologist of the Bureau of Animal Industry, U. S. Department of Agriculture.

Systematic Botany.

BOLLING W. BARTON, M. D., of Baltimore.

Geology.

Professor CLEVELAND ABBE, PH. D., LL. D., of the U. S. Weather Bureau.
Meteorology.

BAILEY WILLIS, C. E., M. E., of the U. S. Geological Survey.
Stratigraphic and Structural Geology.

French Literature.

Professor FREDERICK M. WARREN, PH. D., of Adelbert College.

History, Politics, and Economics.

Professor JAMES SCHOULER, LL. D., of Boston University.
Industrial History of the United States.

JEFFREY R. BRACKETT, PH. D., of Baltimore.
Public Aid, Charities, and Correction.

JAMES M. CALLAHAN, PH. D., of Baltimore.
Diplomatic History.

Professor JOHN H. LATANE, PH. D., of the Randolph-Macon Woman's College, Va.
American Diplomatic History.

Classical Archæology.

MITCHELL CARROLL, PH. D., late Professor of Greek in Richmond College.

Internes of the Johns Hopkins Hospital.

The following graduates of the Johns Hopkins Medical School are Resident House Officers of the Johns Hopkins Hospital:

William S. Baer, M. D.
A. B., Johns Hopkins University, 1894, and M. D., 1898.

Arthur W. Elting, M. D.
A. B., Yale University, 1894; M. D., Johns Hopkins University, 1898.

William W. Ford, M. D.
A. B., Adelbert College, 1893; M. D., Johns Hopkins University, 1898.

Thomas W. Hastings, M. D.
A. B., Johns Hopkins University, 1894, and M. D., 1898.

Alfred B. Herrick, M. D.
A. B., Williams College, 1894; M. D., Johns Hopkins University, 1898.

James H. M. Knox, Jr., Ph. D., M. D.
A. B., Yale University, 1892, and Ph. D., 1894; A. M., Lafayette College, 1896; M. D., Johns Hopkins University, 1898.

James D. Madison, M. D.
S. B., University of Wisconsin, 1894; M. D., Johns Hopkins University, 1898.

Harry T. Marshall, M. D.
A. B., Johns Hopkins University, 1894, and M. D., 1898.

Georgiana Sands, M. D.
A. B., Vassar College, 1893; M. D., Johns Hopkins University, 1898.

Benjamin R. Schenck, M. D.
A. B., Williams College, 1894; M. D., Johns Hopkins University, 1898.

Walter R. Steiner, M. D.
A. B., Yale University, 1892, and A. M., 1896; M. D., Johns Hopkins University, 1898.

Andrew H. Whitridge, M. D.
S. B., Harvard University, 1894; M. D., Johns Hopkins University, 1898.

Additional Assistants for the Current Year.

The following names are those of students who render more or less service to the University in the departments named. In the enumeration, as in former years, such persons are not counted as members of the academic staff:

B. W. Arnold, Ph. D.—*Y. M. C. A.*
M. L. Barr, A. B.—*Y. M. C. A.*
F. R. Blake, A. B.—*Sanskrit.*
J. A. Bonsteel, S. B.—*Geology.*
C. H. Bunting, S. B.—*Anatomy.*
N. S. Ferry, Ph. B.—*Physiol. Chemistry.*
H. A. Fowler, S. B.—*Anatomy.*
J. F. Grant, Ph. B.—*Physiol. Chemistry.*
K. J. Grimm.—*Semitic Lang.*
J. H. Hathaway, A. M.—*Anatomy.*
W. P. Healy, Ph. B.—*Pathology.*
J. Hofmann.—*German.*
W. F. Jelke, Ph. B.—*Physiol. Chemistry.*
W. T. Longcope, A. B.—*Anatomy.*
G. C. Martin, S. B.—*Geology.*
R. D. Miller, A. B.—*English.*
R. B. Rowe, Ph. B.—*Geology.*
M. T. Sudler, Ph. D.—*Biology.*
W. T. Thom, A. M.—*English.*
X. Teillard, B. ès Lett.—*French Conversation.*
L. M. Warfield, A. B.—*Anatomy.*
C. E. Waters, A. B.—*Chemistry.*
S. H. Watts, A. M.—*Anatomy.*

GRADUATE STUDENTS.

FELLOWS BY COURTESY.

BENJAMIN WILLIAM ARNOLD, JR. Bedford City, Va. 906 *McCulloh St.*
A. B., Randolph Macon College, 1891; Ph. D., Johns Hopkins University, 1896. *Economics.*

WILLIAM WILSON BADEN. Baltimore. 929 *McCulloh St.*
A. B., Johns Hopkins University, 1881, Fellow, 1890-92, and Ph. D., 1892; LL. B., University of Maryland, 1883; late Professor of Greek, Central University, Ky. *Sanskrit.*

JOHN DAVIS BATCHELDER. Faribault, Minn. 503 *Mosher St.*
A. B., University of Vermont, 1894; LL. B., University of Minnesota, 1896. *Romance Languages.*

ERNEST JULIUS BECKER. Baltimore. 2131 *Maryland Av.*
A. B., Johns Hopkins University, 1894, and Ph. D., 1898. *English.*

WILLIAM ALEXANDER ECKELS, Carlisle, Pa. 210 *McMechen St.*
A. B., Dickinson College, 1883, and A. M., 1886; Ph. D., Johns Hopkins University, 1898. *Greek.*

JAMES WILLIAM KERN. Alexandria, Va. *The Shirley.*
University of Virginia, 1881. *Greek, Sanskrit, and Latin.*

BENJAMIN WESLEY KILGORE, Agricultural College, Miss.
S. B., Mississippi Agricultural College, 1888, M. S., 1892, and now Professor of Chemistry; State Chemist of Mississippi.

NICHOLAS KNIGHT. Cazenovia, N. Y. 1028 *McCulloh St.*
A. B., Syracuse University, 1883, A. M. and Ph. D., 1888; late Acting Professor, Randolph-Macon College. *Chemistry.*

HENRY MCELDERRY KNOWER. Baltimore. 3 *W. Biddle St.*
A. B., Johns Hopkins University, 1890, Fellow, 1894-95, Bruce Fellow, 1895-96, and Ph. D., 1896; late Instructor in Biology, Williams College. *Biology.*

PAUL HENRY LAND. Baltimore. [*Absent.*]
A. B., Calvin College (O.), 1890; Fellow, Johns Hopkins University, 1896-97. *Hebrew, Assyrian, and Greek.*

EDWARD LINDON MELLUS. Baltimore. 10 *E. Chase St.*
M. D., Jefferson Medical College, 1878. *Anatomy.*

SAMUEL ALFRED MITCHELL. Kingston, Ont. 1005 *W. Lanvale St.*
A. M., Queen's University (Ont.), 1894; Fellow, Johns Hopkins University, 1897-98, and Ph. D., 1898. *Astronomy.*

JENS ANDERSON NESS. Red Wing, Minn. 1122 *McCulloh St.*
A. B., Luther College, 1884, and A. M., 1890; Fellow, Johns Hopkins University, 1896-98. *Sanskrit, Greek, and Latin.*

WILLIAM ALBERT NITZE. Baltimore. *Roland Park.*
A. B., Johns Hopkins University, 1894, and Fellow, 1897-98. *French, Italian, and German.*

VLADIMIR NOVAK. Prague, Austria. 1924 *E. Madison St.*
Ph. D., University of Prague, 1892. *Physics.*

HENRY NEVILL SANDERS. Toronto, Ont. [*Absent.*]
A. B., Trinity University (Toronto), 1894; Fellow, Johns Hopkins University, 1897-98. *Greek, Sanskrit, and Latin.*

GEORGE SHIPLEY. Baltimore. 1019 *Linden Av.*
A. B., Randolph-Macon College, 1887; Ph. D., Johns Hopkins University, 1897. *English.*

CHARLES ALFONSO SMITH. Baton Rouge, La. 817 *N. Howard St.*
A. B., Davidson College, 1884; Ph. D., Johns Hopkins University, 1893; Professor of English, Louisiana State University. *English.*

JAMES POWELL COCKE SOUTHALL. Norfolk, Va. 416 *W. Hoffman St.*
A. M., University of Virginia, 1893; late Professor of Physics and Mathematics, Miller Manual Labor School. *Physics.*

WILLIAM TAYLOR THOM. Ashton. 2428 *Eutaw Place.*
A. B., Washington and Lee University, 1869, A. M., 1870, and D. L., 1889. *History, Politics, and Economics.*

FREDERICK HENRY WILKENS. Baltimore. *The Albion.*
A. B., Johns Hopkins University, 1884; Ph. D., University of Leipsic, 1891; late Assistant Professor, University of Wisconsin. *German.*

(21)

ADAM T. BRUCE FELLOW.

GILMAN ARTHUR DREW. Newton, Iowa. 502 *W. Lafayette Av.*
S. B., Iowa State University, 1890; Fellow, Johns Hopkins University, 1897-98, Ph. D., 1898, and now Assistant in Zoology. *Zoology.* [*Did not enter on the Fellowship.*]

FELLOWS.

THOMAS SEWELL ADAMS. Baltimore. 710 *N. Gilmor St.*
A. B., Johns Hopkins University, 1896. *Economics, Politics, and Philosophy.*

JOHN WILLIAM BASORE. Broadway, Va. 1504 *Linden Av.*
A. B., Hampden-Sidney College, 1893. *Latin, Greek, and Sanskrit.*

FRANK RINGGOLD BLAKE. Baltimore. 1917 *Druid Hill Av.*
A. B., Johns Hopkins University, 1897. *Sanskrit, Hebrew, and German.*

PIERCE BUTLER. New Orleans, La. 26 *E. Mt. Vernon Pl.*
A. B., Tulane University, 1892, and A. M., 1894. *English, French, and History.*

JOSEPH SCUDDER CHAMBERLAIN. Hudson, O. 251 *W. Hoffman St.*
S. B., Iowa Agricultural College, 1890, and M. S., 1892. *Chemistry, Biology, and Geology.*

PERCY MILLARD DAWSON. Montreal, Canada. 1640 *E. Fayette St.*
A. B., Johns Hopkins University, 1894, and M. D., 1898. *Physiology.*

GEORGE STRONACH FRAPS. Raleigh, N. C. 1424 *Druid Hill Av.*
S. B., North Carolina Agricultural College, 1896. *Chemistry, Physics, and Geology.*

PIERRE JOSEPH FREIN. Gt. Barrington, Mass. 637 *W. Franklin St.*
A. B., Williams College, 1892. *French, Italian, and History.*

LEONIDAS CHALMERS GLENN. Crowder's Creek, N. C. 1030 *N. Eutaw St.*
A. B., South Carolina College, 1891. *Geology, Mineralogy, and Biology.*

CASWELL GRAVE. Monrovia, Ind. 1125 *Argyle Av.*
S. B., Earlham College, 1895. *Zoology, Botany, and Physiology.*

KARL JOSEF GRIMM. Baltimore. 429 *N. Gilmor St.*
Tauberbischofsheim Gymnasium. *Biblical Philology, Assyrian, and Philosophy.*

HOLLISTER ADELBERT HAMILTON. Rochester, N. Y. 810 *Harlem Av.*
A. B., University of Rochester, 1892. *Greek, Latin, and Sanskrit.*

GEORGE OSCAR JAMES. Bowers Hill, Va. 906 *McCulloh St.*
A. B., Johns Hopkins University, 1895. *Mathematics, Physics, and Astronomy.*

WILLIAM KURRELMEYER. Baltimore. 512 *N. Carrollton Av.*
A. B., Johns Hopkins University, 1896. *German, French, and Sanskrit.*

JOSEPH FRANCIS MERRILL. Richmond, Utah. 881 *N. Howard St.*
S. B., University of Michigan, 1893. *Physics, Electricity, and Mathematics.*

ALFRED WILLIAM MILDEN. Cornwall, Ont. 1113 *Bolton St.*
A. B., University of Toronto, 1888. *Greek, Latin, and Sanskrit.*

EUGENE LINDSAY OPIE. Baltimore. 219 *W. Monument St.*
A. B., Johns Hopkins University, 1893, and M. D., 1897. *Pathology.*

FREDERICK ALBERT SAUNDERS. Ottawa, Canada. 1114 *McCulloh St.*
A. B., University of Toronto, 1896. *Physics, Mathematics, and Astronomy.*

LAURENCE FREDERICK SCHMECKEBIER. Baltimore. 1620 *W. Lexington St.*
A. B., Johns Hopkins University, 1896. *History, Economics, and Politics.*

HENRY SKINNER WEST. Baltimore. 2438 *Maryland Av.*
A. B., Johns Hopkins University, 1893. *English, History, and Philosophy.*

(30)

UNIVERSITY SCHOLARS.

EDWARD WILLIAM BERGER. Berea, O. 622 *Dolphin St.*
A. B., German Wallace College, 1891; Ph. B., Baldwin University, 1894. *Zoology, Physiology, and Botany.*

HORACE GREELEY BYERS. Pulaski, Pa. 846 *N. Eutaw St.*
A. B. and S. B., Westminster College (Pa.), 1895. *Chemistry, Physics, and Mathematics.*

GEORGE MILTENBERGER CLARKE. Baltimore. 206 *Laurens St.*
A. B., Johns Hopkins University, 1898. *History and Politics.*

FRANCIS WHITTEMORE CRAGIN. Colo. Springs, Colo. 248 *W. Hoffman St.*
S. B., Harvard University, 1883. *Geology, Mineralogy, and Biology.*

GUSTAVUS CHARLES DOHME. Baltimore. 1808 *Guilford Av.*
A. B., Johns Hopkins University, 1898. *Medicine.*

HERBERT BALDWIN FOSTER. Baltimore. 18 *E. Centre St.*
A. B., Harvard University, 1896. *Greek, Sanskrit, and Latin.*

THOMAS HOWARD FOWLER. Chestertown. 671 *W. Lexington St.*
A. B., Washington College, 1897, and A. M., 1898. *German, Sanskrit, and English.*

SIVERT N. HAGEN. Hagan, Minn. 917 *McCulloh St.*
A. B., Luther College, 1896. *English, German, and French.*

HENRY JOHN LUCKE. Baltimore. 519 *N. Carey St.*
A. B., Johns Hopkins University, 1898. *Physics, Mathematics, and Astronomy.*

CHARLES RANALD MCINNES. Vankleek Hill, Ont. 1113 *Bolton St.*
A. M., Queen's University (Ont.), 1896. *Mathematics, Physics, and Astronomy.*

RAYMOND DURBIN MILLER. Baltimore. 23 *Chestnut Av.*
A. B., Johns Hopkins University, 1898. *History.*

HAROLD PENDER. Baltimore. *Roland Park.*
A. B., Johns Hopkins University, 1898. *Physics, Electricity, and Mathematics.*

THOMAS LINDLEY PYLE. Pylesville. 514 *N. Eutaw St.*
A. B., Johns Hopkins University, 1898. *Greek, Latin, and Sanskrit.*

GEORGE LOVIC PIERCE RADCLIFFE. Lloyds. *Sudbrook Park.*
A. B., Johns Hopkins University, 1897. *History, Economics, and Politics.*

HERBERT MEREDITH REESE. Baltimore. 2132 *Oak St.*
A. B., Johns Hopkins University, 1897. *Physics, Mathematics, and Chemistry.*

VINCENT ADAMS RENOUF. Baltimore. 416 *W. Hoffman St.*
A. B., Johns Hopkins University, 1898. *History and Politics.*

JAMES EUSTACE SHAW. Florence, Italy. 1314 *McCulloh St.*
A. B., Johns Hopkins University, 1896. *Romance Languages.*

ST. GEORGE LEAKIN SIOUSSAT. Baltimore County. *Lake Roland.*
A. B., Johns Hopkins University, 1896. *History, Politics, and Economics.*

CHARLES SIDNEY SMITH. Princeton, N. J. 1503 *Madison Av.*
A. B., Princeton University, 1883, and A. M., 1891. *Latin, Greek, and Sanskrit.*

ALBERT GAD STIDMAN. Baltimore. 610 *Mosher St.*
A. B., Johns Hopkins University, 1898. *Modern Languages.*

(30)

PHILOSOPHICAL STUDENTS.

WILLIAM MARSHALL ALLEN. Wadesboro, N. C. 1424 *Druid Hill Av.*
S. B., Rutherford College, 1888, and M. S., 1898. *Chemistry.*

HERBERT THOMPSON ARCHIBALD. Halifax, N. S. 1612 *Mt. Royal Av.*
A. B., Dalhousie University, 1897, and A. M., 1898. *Greek, Latin, and German.*

JAMES NORTHRUP ATKINSON. Ottawa, Kan. 1321 *Madison Av.*
A. B., Ottawa University, 1898. *History and Politics.*

ZADOK MARSHALL BALLARD. Baltimore. 114 *W. Mulberry St.*
A. B., Johns Hopkins University, 1898. *Chemistry.*

GEORGE ERNEST BARNETT. Mocksville, N. C. 1006 *Madison Av.*
A. B., Randolph-Macon College, 1891. *Economics, History, and Politics.*

MORRIS LINCOLN BARR. Monmouth, Ill. 1124 *McCulloh St.*
A. B., Ohio Wesleyan University, 1890. *English, German, and History.*

JOHN SAVAGE BATES. Annapolis.
A. B., Georgetown University, 1898. *Biology and Chemistry.*

ROBERT BUCHANAN BEALE. Washington, D. C. 8 *W. Preston St.*
S. B., Maryland Agricultural College, 1896. *Electricity.*

WILFRED FITCH BEARDSLEY. Evanston, Ill. 1217 *Madison Av.*
A. B., Northwestern University, 1893. *Greek, Latin, and Sanskrit.*

GEORGE CARLTON BECK. Williamsport, Pa. 312 *N. Paca St.*
S. B., Williamsport Dickinson Seminary, 1897. *Chemistry.*

WILLIAM NOLAND BERKELEY. Charlottesville, Va. 1313 *Madison Av.*
S. B., St. John's College, 1896. *Chemistry, Geology, and Physics.*

ARTHUR BIBBINS. Baltimore. 333 *N. Charles St.*
Ph. B., Albion College, 1887. *Geology.*

HOMER VAN VALKENBURG BLACK. Atlanta, Ga. 906 *McCulloh St.*
A. B., University of Georgia, 1896. *Chemistry, Mineralogy, and Geology.*

IRVING HALL BLACKWELL. Broadrun, Va. 1205 *McCulloh St.*
A. B., Randolph-Macon College, 1895. *Latin.*

WILLIAM MARTIN BLANCHARD. Hertford, N. C. 1006 *Madison Av.*
A. B., Randolph-Macon College, 1894, and A. M., 1897. *Chemistry, Physics, and Math.*

WALTER JOSEPH BOGGS. Baltimore. 815 *N. Eutaw St.*
A. B., Georgetown University, 1898. *History and Politics.*

JAY ALLAN BONSTEEL. Baltimore. 1017 *McCulloh St.*
S. B., Cornell University, 1896. *Geology and Chemistry.*

Rev. WILLIAM WALKER BRANDER. Baltimore. 103 *N. Carey St.*
Virginia Military Inst., 1887; Virginia Theological Sem., 1891. *History and Politics.*

GEORGE DOBBIN BROWN. Howard County. *St. Denis.*
A. B., Johns Hopkins University, 1895. *English.*

GLENN VINTON BROWN. Reisterstown. *Reisterstown.*
Ph. B., Dickinson College, 1898. *Geology and Chemistry.*

ROY HUTCHISON BROWNLEE. Norwood, Ill. 611 *N. Eutaw St.*
A. B., Monmouth College, 1898. *Chemistry, Physics, and Geology.*

BENJAMIN PALMER CALDWELL. New Orleans, La.
A. B., Tulane University, 1893, B. E., 1895, and Ch. E., 1897. *Chemistry.*

HORACE CAMPBELL. Edinburg, Va. 1403 *Madison Av.*
A. M., Randolph-Macon College, 1897. *Economics.*

HALL CANTER. Baltimore. 2315 *Madison Av.*
A. B., Randolph-Macon College, 1892, and A. M., 1897. *Chemistry.*

HOWARD VERNON CANTER. Cantersburg, Va. 1024 *McCulloh St.*
A. B., Washington and Lee University, 1896. *Latin, French, and Spanish.*

WILLIAM ASBURY CASE. Baltimore. 412 *E. Randall St.*
S. B., St. John's College, 1894, and A. M., 1897; M. S., Columbian University, 1895. *Chemistry and Physics.*

CHARLES EDWARD CASPARI. Baltimore. 1129 *Harlem Av.*
A. B., Johns Hopkins University, 1896. *Chemistry.*

VICTOR JOHN CHAMBERS. Rochester, N. Y. 1122 *Madison Av.*
S. B., University of Rochester, 1895. *Chemistry.*

JOSEPH ALBERT CHATARD. Baltimore. 516 *Park Av.*
A. B., Loyola College, 1898. *Biology, Chemistry, and Physics.*

FRIEND EBENEZER CLARK. New Martinsville, W. Va. 1028 *McCulloh St.*
S. B., West Virginia University, 1898. *Chemistry, Geology, and Mineralogy.*

WESLEY MANLEY CLEAVER. Catawissa, Pa. 625 *W. Mulberry St.*
S. B., Bloomsburg (Pa.) Normal School, 1880, and M. S., 1882; A. B., Amherst College, 1886. *Geology, Physics, and Chemistry.*

ARTHUR BYRON COBLE. Lykens, Pa. 1230 *McCulloh St.*
A. B., Pennsylvania College, 1897. *Mathematics, Astronomy, and Physics.*

WILLIAM CHAMBERS COKER. Wilmington, N. C. 900 *Madison Av.*
S. B., South Carolina College, 1894. *Biology and Geology.*

CHARLES WILLIAM REMSBERG CRUM. Jefferson. 1423 *Park Av.*
A. B., Johns Hopkins University, 1884; M. D., University of Maryland, 1888. *Mathematics.*

WINTERTON CONWAY CURTIS. The Dalles, Ore. 1128 *McCulloh St.*
A. B., Williams College, 1897, and A. M., 1898. *Zoology, Physiology, and Palæontology.*

WAVERLEY BAYARD DANIEL. Garysburg, N. C. 1217 *Madison Av.*
A. M., Wake Forest College, 1892. *Latin, Greek, and Roman Law.*

Rev. JOSEPH DAWSON. Baltimore. 205 *E. North Av.*
A. B., De Pauw University, 1892; S. T. B., Boston University, 1896. *Economics and History.*

EDWIN TRUNDLE DICKERSON. Dickerson. 2414 *Madison Av.*
A. B., Maryland Agricultural College, 1898. *History, Economics, and Politics.*

JAMES MCDOWELL DOUGLAS. Gastonia, N. C. 1307 *Linden Av.*
A. B., Davidson College, 1893, and A. M., 1894. *Chemistry, Physics, and Mathematics.*

WILLIAM SIDNEY DREWRY. Fayetteville, N. C. 1206 *McCulloh St.*
A. B., Ph. B., and A. M., University of Virginia, 1893. *History and Economics.*

LUTHER PFAHLER EISENHART. York, Pa. 1122 *Madison Av.*
A. B., Pennsylvania College, 1896. *Mathematics, Physics, and Astronomy.*

HOWARD SHEFFER ESTILL. Lexington, Ky. 1217 *Madison Av.*
Virginia Military Institute, 1896. *Electricity.*

ARTHUR HENRY EWING. Ludhiana, India. 1214 *Madison Av.*
A. B., Washington and Jefferson College, 1887; Western Theological Seminary, 1890. *Sanskrit, Philosophy, and Arabic.*

JAMES REES EWING. Granville, O. 238 *W. Hoffman St.*
A. B., Ohio Wesleyan University, 1890; Ph. D., Johns Hopkins University, 1899. *History, Politics, and Philosophy.*

JAMES MARION FARR. Union, S. C. 1307 *Linden Av.*
A. B., Davidson College, 1894, and A. M., 1895. *English, German, and French.*

JOHN SOMERVILLE FISCHER. Baltimore. 9 *E. Biddle St.*
A. B., Johns Hopkins University, 1898. *Chemistry.*

THOMAS FITZGERALD, JR. Baltimore. 1904 *Madison Av.*
A. B., Johns Hopkins University, 1898. *Electricity.*

Rev. THEODORE CLINTON FOOTE. Cleveland, O. 816 *N. Eutaw St.*
A. B., Racine College, 1880, and A. M., 1883; S. T. B., General Theological Seminary (N. Y.), 1884. *Latin, Greek, and Hebrew.*

WILLIAM LINWOOD FOUSHEE. Roxboro, N. C. 1206½ *McCulloh St.*
A. M., Wake Forest College, 1894. *Greek, Latin, and Sanskrit.*

JOSEPH CHRISTIE WHITNEY FRAZER. Lexington, Ky. 1217 *Madison Av.*
S. B., Kentucky State College, 1897, and M. S., 1898. *Chemistry, Physics, and Electricity.*

ALBERT THOMAS FREEMAN. Canandaigua, N. Y. 953 *Madison Av.*
A. B., University of Rochester, 1895. *History, Economics, and Politics.*

WIGHTMAN WELLS GARNER. Darlington, S. C. 853 *N. Eutaw St.*
A. B., South Carolina College, 1896. *Chemistry.*

ROBERT GARRETT. Baltimore County. *Govanstown.*
S. B., Princeton University, 1897. *History and Politics.*

NORMAN EVERETT GILBERT. Middletown, Conn. 1028 *McCulloh St.*
A. B., Wesleyan University, 1895, and A. M., 1896. *Physics, Mathematics, and Astronomy.*

CLYDE CHEW GLASCOCK. Buckland, Va. 1120 *Linden Av.*
University of Virginia, 1892. *German, French, and Latin.*

WILLIAM ELFORD GOULD. New York City. 935 *McCulloh St.*
A. B., Columbia University, 1879. *Romance Languages.*

LAWRENCE EDMONDS GRIFFIN. Hamline, Minn. 1217 *McCulloh St.*
A. B. and Ph. B., Hamline University, 1895. *Zoology, Physiology, and Botany.*

NATHANIEL EDWARD GRIFFIN. Baltimore. 1027 *N. Calvert St.*
A. B., Johns Hopkins University, 1894. *English, German, and Philosophy.*

GRAVES GRIFFITH. Payne's Depot, Ky. 1010 *McCulloh St.*
A. B., Central University, 1891. *Latin, English, and Greek.*

Rev. PINCKNEY LAFAYETTE GROOME. Greensboro, N. C. 1603 *N. Calvert St.*
A. B., Trinity College (N. C.), 1877. *History.*

FELIX GUENTHER, JR. Cleveland, O. 906 *McCulloh St.*
S. B., Case School of Applied Science, 1896. *Chemistry.*

ROSCOE GUERNSEY. East Cobleskill, N. Y. 1013 *Linden Av.*
A. B., Union College, 1896. *Greek, Latin, and Sanskrit.*

Rev. ADOLPH GUTTMACHER. Baltimore. 1833 *Linden Av.*
A. B., University of Cincinnati, 1887. *Hebrew, Arabic, and Philosophy.*

FRANK ARNOLD HANCOCK. Baltimore. 823½ *W. Lombard St.*
A. B., Johns Hopkins University, 1897. *Chemistry.*

CALEB NOTBOHM HARRISON. Milwaukee, Wis. 914 *N. Fulton Av.*
B. C. E., University of Wisconsin, 1882; Ph. D., Johns Hopkins Univ., 1898. *Physics.*

ROBERT WHITTY HAYWOOD. Wilmington, N. C. 1200 *McCulloh St.*
A. B., Wake Forest College, 1894, and A. M., 1895. *Latin, Greek, and Sanskrit.*

JOSEPH CAWDELL HERRICK. University of Virginia. 209 *E. Preston St.*
A. B., University of Virginia, 1896. *Biology, Chemistry, and Physics.*

FRED. COLE HICKS. Tipton, Iowa. 1709 *Madison Av.*
Ph. B., Cornell College, 1896. *German, French, and History.*

HENRY H. HINDSHAW. Baltimore. 2316 *N. Calvert St.*
S. B., Chicago School of Science, 1891. *Geology and Biology.*

Rev. JULIUS HOFMANN. Baltimore. 915 *Harlem Av.*
University of Giessen. *German, French, and Philosophy.*

WILLIS BOIT HOLMES. Cambridge, Mass. 1217 *McCulloh St.*
A. B., Harvard University, 1896, and A. M., 1897. *Chemistry, Geology, and Mineralogy.*

FRAZER HOOD. Tupelo, Miss. 528 *W. Mulberry St.*
A. B., Southwestern Presbyterian University, 1896. *English.*

DAVID WILBUR HORN. Carlisle, Pa. 2257 *Madison Av.*
A. B., Dickinson College, 1897. *Chemistry, Physics, and Biology.*

WILLIAM BASHFORD HUFF. Boscobel, Wis. 300 *Dolphin St.*
A. B., University of Wisconsin, 1889; A. M., University of Chicago, 1896. *Physics.*

JULIAN HUGUENIN. Charleston, S. C. 1211 *Madison Av.*
A. B., Charleston College, 1893. *English, German, and French.*

WALTER HULLIHEN. Staunton, Va. 1228 *St. Paul St.*
A. B. and A. M., University of Virginia, 1896. *Latin, Greek, and German.*

ROBERT EDMUND HUMPHREYS. Salem, Va. 1405 *Madison Av.*
A. B. and A. M., Emory and Henry College, 1889. *Chemistry, Geology, and Mineralogy.*

NORTON ADAMS KENT. Baltimore. 1210 *McCulloh St.*
A. B., Yale University, 1895. *Physics.*

STEPHEN HENRY KING. Baltimore. 1529 *Bolton St.*
M. D., Harvard University, 1872. *Chemistry and Physics.*

CARL KINSLEY. Falls Church, Va. 1709 *Madison Av.*
A. B., Oberlin College, 1893, and A. M., 1896; M. E., Cornell University, 1894. *Physics, Mathematics, and Electricity.*

GEORGE PHILIP KRAPP. New York City. [*Absent.*]
A. B., Wittenberg College, 1894; Ph. D., Johns Hopkins University, 1899. *English, French, and German.*

JUNIUS EDGAR LEIGH. Richmond, Va. 921 *McCulloh St.*
Latin and Modern Languages.

WILLARD PARKER LINDLEY. New York City. 1209 *Madison Av.*
Ph. B., Yale University, 1897. *Chemistry.*

ROBERT EDWARD LOVING. Wilmington, Va. 1204 *McCulloh St.*
A. B., Richmond College, 1896, and A. M., 1898. *Mathematics, Physics, and Astronomy.*

CHARLES EDWARD LYON. Mt. Wilson. 1841 *Druid Hill Av.*
A. B., Johns Hopkins University, 1897. *German and Latin.*

OLIVER JONES MARSTON. Hoopeston, Ill. 1124 *McCulloh St.*
S. B., Greer College (Ill.), 1897, and A. B., 1898. *History and Politics.*

GEORGE CURTIS MARTIN. Adams, Mass. 1030 *N. Eutaw St.*
S. B., Cornell University, 1898. *Geology.*

WILLIAM ELEJIUS MARTIN. Havana, Ala. 1709 *Madison Av.*
A. M., Southern University (Ala.), 1898. *Romance Languages.*

MEADE BOLTON MCBRYDE. Blacksburg, Va. 1313 *Madison Av.*
Virginia Polytechnic Institute. *History, English, and Economics.*

PAUL MCJUNKIN. Baltimore. 1028 *McCulloh St.*
S. B., Massachusetts Institute of Technology, 1898. *Physics.*

ANDREW CYRUS MCLAUGHLIN. Austin, Texas. 1314 *McCulloh St.*
S. B., University of Texas, 1898. *Geology and Chemistry.*

Rev. WILLIAM BRUCE MCPHERSON. Middle River. *Middle River.*
A. B., Hobart College, 1892, and A. M., 1895. *Semitic Languages.*

ASHTON WAUGH MCWHORTER. Salem, Va. 908 *McCulloh St.*
A. B., Roanoke College, 1895. *Greek, Latin, and Sanskrit.*

JOHN FRANKLIN MEYER. Penn Hall, Pa. 306 *E. Twenty-third St.*
A. B., Franklin and Marshall College, 1894, and A. M., 1897. *Physics, Chemistry, and Mathematics.*

LOUIS WARDLAW MILES. Baltimore. 514 *Cathedral St.*
A. B., Johns Hopkins University, 1894; M. D., University of Maryland, 1897. *English.*

WALTER ALEX. MONTGOMERY, JR. Raleigh, N. C. 1217 *Madison Av.*
A. B., Johns Hopkins University, 1893, and Ph. D., 1899. *Greek, Latin, and Philosophy.*

JOSEPH HAINES MOORE. Wilmington, O. 916 *McCulloh St.*
A. B., Wilmington College, 1898. *Mathematics, Physics, and Astronomy.*

CHARLES ALFRED MOSEMILLER. New Albany, Ind. 921 *McCulloh St.*
A. B., Indiana University, 1890. *Romance Languages.*

DANIEL ESTEN MOTLEY. Chatham, Va. 1024 *McCulloh St.*
A. B., Milligan College (Tenn.), 1894. *History, Economics, and Philosophy.*

WILLIAM STARR MYERS. Asheville, N. C. 1217 *McCulloh St.*
A. B., University of North Carolina, 1897. *History, Economics, and Politics.*

ROKURO NAKASEKO. Kyoto, Japan. 906 *McCulloh St.*
Doshisha University, 1889. *Chemistry, Physiology, and Biology.*

JOHN CHARLES OLSEN. Galesburg, Ill. 1611 *W. Lanvale St.*
A. B., Knox College, 1890, and A. M., 1893. *Chemistry.*

D'ARCY PAUL PARHAM. Hampton, Va. 1314 *McCulloh St.*
A. M., Randolph-Macon College, 1891. *English, French, and History.*

LOUIS ALEXANDER PARSONS. Burlington, Iowa. 1225 *Druid Hill Av.*
A. B., Iowa State University, 1895. *Physics, Mathematics, and Chemistry.*

AUSTIN MCDOWELL PATTERSON. Xenia, O. 327 *W. Biddle St.*
A. B., Princeton University, 1897. *Chemistry, Mineralogy, and Geology.*

HENRY FARNHAM PERKINS. Burlington, Vt. 906 *McCulloh St.*
A. B., University of Vermont, 1896. *Biology.*

CLARK EDMUND PERSINGER. Central City, Neb. 906 *McCulloh St.*
A. B., Cornell College, 1897. *History, Economics, and Politics.*

LOUIS MAXWELL POTTS. Canonsburg, Pa. 1128 *McCulloh St.*
A. B., Washington and Jefferson College, 1896. *Physics.*

GEORGE RAGLAND. Richmond, Va. 1204 *McCulloh St.*
A. B., Richmond College, 1896. *Greek, Latin, and Sanskrit.*

WILLIAM ALEXANDER READ. Bristol, Va. 1205 *McCulloh St.*
A. B., King College (Tenn.), 1888; Ph. D., University of Heidelberg, 1897. *Romance Languages.*

ALBERT MOORE REESE. Baltimore. 1435 *Bolton St.*
A. B., Johns Hopkins University, 1892. *Zoology, Palæontology, and Botany.*

Rev. WILLIAM ROSENAU. Baltimore. 1618 *Druid Hill Av.*
A. B., University of Cincinnati, 1888; Hebrew Union College of Cincinnati, 1889. *Hebrew, Arabic, and Philosophy.*

RICHARD BURTON ROWE. Clarksville, N. Y. 1011 *McCulloh St.*
Ph. B., Union College, 1896. *Geology.*

Rev. CHARLES AARON RUBENSTEIN. Baltimore. 2036 *Linden Av.*
B. L., University of Cincinnati, 1891; A. M., Columbia University, 1896. *Romance Languages.*

GEORGE WISE RUSSELL. Onancock, Va. 916 *McCulloh St.*
A. B., Randolph-Macon College, 1892, and A. M., 1893. *Chemistry, Physics, and Mathematics.*

CHARLES ALBERT SAVAGE. Baltimore. 1225 *Linden Av.*
A. B., Johns Hopkins University, 1895. *Greek, Latin, and Sanskrit.*

Rev. TOBIAS SCHANFARBER. Baltimore. 2030 *Madison Av.*
A. B., University of Cincinnati, 1885; Hebrew Union College of Cincinnati, 1888. *Semitic Languages.*

CHARLES CARROLL SCHENCK. Baltimore. 1007 *St. Paul St.*
A. B., Johns Hopkins University, 1893. *Physics, Mathematics, and Chemistry.*

JOHN PHILIP SCHNEIDER. Cooperstown, N. Y. 1228 *McCulloh St.*
A. B., Wittenberg College, 1896; A. M., Columbia University, 1898. *German, English, and History.*

THEODORE HAUSMANN SCHOEPF. Hyattsville. *Hyattsville.*
C. E., Rensselaer Polytechnic Institute, 1896. *Electricity.*

WARD WEAVER SIMMONS. Brooklyn, N. Y. 1218 *Madison Av.*
S. B., Brooklyn Polytechnic Institute, 1897. *Chemistry, Physics, and Biology.*

Rev. JOHN BARRY SMITH, S. J. Baltimore. *Loyola College.*
A. B., Holy Cross College (Worcester), 1885. *Chemistry.*

VICTOR EDGEWORTH SMITH. Baltimore. 22 *E. Mt. Vernon Place.*
A. B., Johns Hopkins University, 1898. *History and Politics.*

CHARLES SNAVELY. Massillon, O. 1214 *McCulloh St.*
A. B., Otterbein University, 1894. *History, Economics, and Social Science.*

CHARLES WILLIAM SOMMERVILLE. White Post, Va. 2020 *N. Calvert St.*
A. B. and S. B., Hampden-Sidney College, 1890, and A. M., 1896; Union Theological Seminary (Va.), 1895. *History, Politics, and Philosophy.*

CHARLES BYFIELD SPARKS. Sewanee, Tenn. 1118 *Madison Av.*
Virginia Theological Seminary, 1893. *Semitic Languages.*

LEO D. STEIN. Baltimore. 215 *E. Biddle St.*
A. B., Johns Hopkins University, 1898. *Zoology, Physiology, and Botany.*

MERVIN TUBMAN SUDLER. Westover. 849 *N. Eutaw St.*
S. B., Maryland Agricultural College, 1894; Ph. D., Johns Hopkins University, 1899. *Zoology, Physiology, and Botany.*

JOHN WESLEY RICHARDSON SUMWALT. Baltimore. 529 *S. Charles St.*
A. B., Johns Hopkins University, 1896. *Semitic Languages.*

MORRIS CRATER SUTPHEN. Morristown, N. J. 1503 *Madison Av.*
A. B., Princeton University, 1890, and A. M., 1893. *Latin, Greek, and Sanskrit.*

Rev. FRANCIS ANTONY TONDORF, S. J. Baltimore. *Loyola College.*
Ph. D., Woodstock College, 1895. *Physics, Mathematics, and Biology.*

HAROLD JOHN TURNER. Baltimore. 212 *E. Lafayette Av.*
A. B., Johns Hopkins University, 1892. *Chemistry, Geology, and Physics.*

JAMES CHASE TYLER. Fairview, Kan. 1223 *Druid Hill Av.*
S. B., Ottawa University (Kan.), 1898. *History and Politics.*

ELISHA CHISHOLM WALDEN. Cincinnati, O. 1006 *Madison Av.*
A. B., Ohio Wesleyan University, 1892; M. S., University of Cincinnati, 1897. *Zoology, Physiology, and Bacteriology.*

WILLIAM FISHER WALLIS. Baltimore. 302 *E. Twentieth St.*
A. B., Johns Hopkins University, 1896. *Mathematics.*

CAMPBELL EASTER WATERS. Baltimore. *Thirteenth St., Walbrook.*
A. B., Johns Hopkins University, 1895. *Chemistry, Mineralogy, and Botany.*

CHARLES CLINTON WEAVER. Greensboro, N. C. 1206½ *McCulloh St.*
A. B., Trinity College (N. C.), 1896. *History, Politics, and Jurisprudence.*

JAMES BLANTON WHAREY. Mooresville, N. C. 1307 *Linden Av.*
A. B., Davidson College, 1892, and A. M., 1894. *English, German, and French.*

ALBERT LIVINGSTON WILKINSON. North Keys. 905 *McCulloh St.*
A. B., St. John's College, 1898. *Biology, Chemistry, and Physics.*

FRANK DANIEL WILSON. Chatham, Va. 1313 *Madison Av.*
S. B., Virginia Polytechnic Institute, 1894, and M. S., 1898. *Chemistry, Geology, and Mineralogy.*

JAMES HENRY CURRY WINSTON. Farmville, Va. 1130 *Argyle Av.*
A. B., and S. B., Hampden-Sidney College, 1894. *Chemistry, Physics, and Mathematics.*

FREDERICK BENNETT WRIGHT. Oberlin, O. 1120 *Linden Av.*
S. B., Oberlin College, 1897. *Geology.*

JACOB FORNEY YOUNG. Baltimore. 1418 *Druid Hill Av.*
A. B., Johns Hopkins University, 1898. *Chemistry.*

(142)

ATTENDANTS ON SINGLE COURSES OF LECTURES.

Chemistry.

ALEXANDER LAZEAR SETH. Baltimore. *Windsor, near Walbrook.*
A. B., Johns Hopkins University, 1893.

JAMES F. FERGUSON. Baltimore. 873 *Park Av.*
A. B., Johns Hopkins University, 1898.

History, Economics, and Politics.

Rev. JOHN THOMAS ENSOR. Baltimore County. *St. Denis P. O.*
A. B., New Windsor College, 1889.

Rev. CHARLES ELLSWORTH GUTHRIE. Baltimore. 655 *Columbia Av.*

Mathematics.

RICHARD HENRY UHRBROCK. Baltimore. 910 *Light St.*
Ph. B., Illinois Wesleyan University, 1897.

Romance Languages.

XAVIER TEILLARD. Washington, D. C. *Washington.*
B. ès Lett., University of France, 1873.

Semitic Languages.

Rev. WILLIAM CALDWELL. Baltimore. 301 *E. North Av.*
A. M., Southwestern Presbyterian University, 1888; Princeton Theological Seminary, 1891.

(7)

MEDICAL STUDENTS.

Candidates for the Degree of M. D.

Fourth Year.

Edward Erle Brownell.	Woodland, Cal.	1005 *N. Charles St.*
Ph. B., Yale University, 1895.		
Humphrey Warren Buckler.	Baltimore.	806 *Cathedral St.*
A. B., Johns Hopkins University, 1895.		
Rufus Ivory Cole.	Peru, Ill.	1705 *Fairmount Av.*
S. B., University of Michigan, 1896.		
Frank Curtis Davis.	Minneapolis, Minn.	1005 *N. Charles St.*
A. B., Amherst College, 1895.		
John Staige Davis.	Baltimore.	1005 *N. Charles St.*
Ph. B., Yale University, 1895.		
Charles Phillips Emerson.	Methuen, Mass.	103 *Jackson Place.*
A. B., Amherst College, 1894.		
Blanch N. Epler.	Oakland, Cal.	129 *E. North Av.*
S. B., University of California, 1895.		
Joseph Erlanger.	San Francisco, Cal.	126 *Jackson Place.*
S. B., University of California, 1895.		
Philip Saffery Evans, Jr.	Baltimore.	802 *N. Broadway.*
A. B., Yale University, 1895.		
Richard Holden Follis, Jr.	San Francisco, Cal.	1005 *N. Charles St.*
Ph. B., Yale University, 1895.		
Frank Taylor Fulton.	Warsaw, Ill.	1734 *E. Fayette St.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1895.		
James Daton Gallagher.	Steubenville, O.	707 *N. Broadway.*
A. B., Johns Hopkins University, 1895.		
Henry Harris.	Olympia, Wash.	121 *Jackson Place.*
A. B., Leland Stanford Jr. University, 1895.		
Henry Joseph Hoye.	Providence, R. I.	714 *N. Broadway.*
A. B., Brown University, 1895.		
Louis Williams Ladd.	Baltimore.	1705 *Fairmount Av.*
A. B., Yale University, 1895.		
Charles Sumner Little.	Evansville, Ind.	422 *N. Broadway.*
A. B., Wabash College, 1894.		
John Arthur Luetscher.	Sauk City, Wis.	104 *Jackson Place.*
S. B., University of Wisconsin, 1895.		
Frank Allemong Lupton.	Auburn, Ala.	527 *N. Wolfe St.*
S. B., Alabama Polytechnic Institute, 1891, and M. S., 1892; Graduate Student, Johns Hopkins University, October to January, 1893-94.		
Frank Worthington Lynch.	Cleveland, O.	802 *N. Broadway.*
A. B., Adelbert College, 1895.		
Chester Lea Magee.	San Diego, Cal.	519 *N. Wolfe St.*
A. B., Leland Stanford Jr. University, 1895, and A. M., 1896.		

HUGH MILLER MOORE. Oxford, O. 1033 *N. Broadway.*
S. B. and M. S., Miami University, 1895.

CHARLES WILLIAMS OTTLEY. Atlanta, Ga. 1727 *Fairmount Av.*
A. B., Princeton University, 1893.

PAUL OCTAVIUS OWSLEY. Chicago, Ill. 1005 *N. Charles St.*
Ph. B., Yale University, 1895.

JACOB HALL PLEASANTS, JR. Baltimore. 606 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SYLVAN ROSENHEIM. Baltimore. 521 *N. Wolfe St.*
A. B., Johns Hopkins University, 1895.

JOHN ALBERTSON SAMPSON. Troy, N. Y. 103 *Jackson Place.*
A. B., Williams College, 1895.

HALBERT SEVERIN STEENSLAND. Madison, Wis. 1734 *E. Fayette St.*
S. B., University of Wisconsin, 1895.

WILLIAM RIDGELY STONE. Washington, D. C. 113 *W. Mulberry St.*
A. B., Princeton University, 1895.

EDGAR RANDOLPH STROBEL. Baltimore. 37 *E. North Av.*
A. B., Johns Hopkins University, 1895.

FREDERICK HERMAN VERHOEFF. Louisville, Ky. 1707 *Fairmount Av.*
Ph. B., Yale University, 1895.

WILLIAM WHITRIDGE WILLIAMS. Baltimore. 1128 *Cathedral St.*
A. B., Johns Hopkins University, 1895.

SARAH DELIA WYCKOFF. Dayton, O. 1910 *E. Madison St.*
S. B., Wellesley College, 1894.

LAWRENCE YATES. Milwaukee, Wis. 1005 *N. Charles St.*
Ph. B., Yale University, 1894; S. B., University of Wisconsin, 1895.

(33)

Third Year.

JOSEPH AKERMAN. Cartersville, Ga. 1727 *Fairmount Av.*
A. B., University of Georgia, 1894, and Graduate Student, 1895-96.

HERBERT WILLIAMS ALLEN. Oakland, Cal. 810 *N. Broadway.*
S. B., University of California, 1896.

MABEL FLETCHER AUSTIN. Minneapolis, Minn. 1635 *N. Caroline St.*
S. B., University of Minnesota, 1893.

ALMA EMERSON BEALE. Schaghticoke, N. Y. 129 *Jackson Place.*
A. B., Wellesley College, 1891; Marine Biological Laboratory, Wood's Holl, 1893.

MILTON BETTMANN. Cincinnati, O. 812 *N. Broadway.*
A. B., Harvard University, 1897.

EVELYN BRIGGS. Sacramento, Cal. 118 *Jackson Place.*
A. B., Leland Stanford Jr. University, 1896.

HERMAN BRÜLLE. Fredericksburg, Va. 1016 *N. Broadway.*
A. B. and S. B., Hampden-Sidney College, 1895; Graduate Student, Johns Hopkins University, 1895-96.

CURTIS FIELD BURNAM, JR. Richmond, Ky. 1128 *McCulloh St.*
A. B., Central University (Ky.), 1895; Graduate Student, Johns Hopkins University, 1895-96.

ELEANOR SARAH CHACE. Fall River, Mass. 144 *Jackson Place.*
S. B., Wellesley College, 1894.

ARTHUR SMITH CHITTENDEN. Binghamton, N. Y. 132 *Jackson Place.*
A. B., Yale University, 1896.

HENRY ASBURY CHRISTIAN. Lynchburg, Va. 804 *N. Broadway.*
A. B. and A. M., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

WILLIAM REMSHART DANCY. Savannah, Ga. 802 *N. Broadway.*
S. B., University of Georgia, 1896.

AUGUSTUS HARTJE EGGERS. Allegheny, Pa. 806 *N. Broadway.*
Ph. B., Yale University, 1896.

HENRY COURTNEY EVANS. Youngstown, O. 802 *N. Howard St.*
A. B., Adelbert College, 1896.

ROSE FAIRBANK. Hatfield, Mass. 313 *N. Broadway.*
A. B., Smith College, 1895.

CLARENCE B. FARRAR. Cattaraugus, N. Y. 413 *N. Charles St.*
A. B., Harvard University, 1896; Harvard Medical School, 1896-97.

ARTHUR LAWRENCE FISHER. San Francisco, Cal. 126 *Jackson Place.*
S. B., University of California, 1896.

WILLIAM ALEXANDER FISHER, JR. Baltimore. 8 *W. Mt. Vernon Place.*
A. B., Princeton University, 1896.

HOWARD FLETCHER. Warrenton, Va. 1731 *Fairmount Av.*
A. B., Randolph-Macon College, 1895, and Graduate Student, 1895-96.

JOSEPH MARSHALL FLINT. Chicago, Ill. *Govanstown.*
S. B., University of Chicago, 1896.

WILLIAM PATRICK HEALY. Bridgeport, Conn. 810 *N. Broadway.*
Ph. B., Yale University, 1896.

WILLIAM FAITHFUL HENDRICKSON. Baltimore. 236 *N. Carey St.*
A. B., Johns Hopkins University, 1896.

ALBION WALTER HEWLETT. San Mateo, Cal. 802 *N. Broadway.*
S. B., University of California, 1896; Cooper Medical College, 1895-96; University of Chicago, Summer of 1897.

WILLIAM CRISSEY KELLOGG. New Canaan, Conn. 806 *N. Broadway.*
A. B., Yale University, 1896.

PRESTON KYES. North Jay, Me. 1020 *N. Broadway.*
A. B., Bowdoin College, 1896.

LEONA LEBUS. Los Angeles, Cal. 1014 *N. Broadway.*
S. B., Wellesley College, 1889.

WARREN HARMON LEWIS. Oak Park, Ill. 1757 *Jefferson St.*
S. B., University of Michigan, 1894, and Graduate Student, 1894-96.

HARRY WILSON LITTLE. Evansville, Ind. 422 *N. Broadway.*
S. B., Wabash College, 1896.

ELLEN LOUISE LOWELL. Calais, Me. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1896.

JOHN BRUCE MACCALLUM. Dunnville, Ont. 132 *Jackson Place.*
A. B., University of Toronto, 1896.

MARY WILBUR MARVELL. Fall River, Mass. 144 *Jackson Place.*
S. B., Wellesley College, 1894.

CLARA R. MELTZER. New York City. 118 *Jackson Place.*
A. B., Barnard College, Columbia University, 1896.

CLELIA DUEL MOSHER. Stanford Univ., Cal. 811 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1893, and A. M., 1894.

HANNAH GLIDDEN MYRICK. Dorchester, Mass. 129 *Jackson Place.*
A. B., Smith College, 1896.

RICHARD FOSTER RAND. Meriden, Conn. 1707 *Fairmount Av.*
Ph. B., Yale University, 1895, and Graduate Student, 1895-96.

DOROTHY M. REED. Leyden, N. Y. 1635 *N. Caroline St.*
B. L., Smith College, 1895; Graduate Student, Mass. Institute of Technology, 1895-96.

GLANVILLE YEISLEY RUSK. Baltimore. 2000 *E. Baltimore St.*
A. B., Johns Hopkins University, 1896.

FLORENCE RENA SABIN. Denver, Colo. 129 *Jackson Place.*
S. B., Smith College, 1893, and Assistant in Zoology, 1895-96.

WILLIAM FRANCIS MATTINGLY SOWERS. Washington, D. C.
A. B., Princeton University, 1896. 517 *Cathedral St.*

ELLEN APPLETON STONE. Providence, R. I. 122 *Jackson Place.*
A. B., Radcliffe College, Harvard University, 1895; A. M., Brown University, 1896.

MORTIMER WARREN. Cumberland Mills, Me. 1020 *N. Broadway.*
A. B., Bowdoin College, 1896.

JOHN MONTGOMERY WEST. Baltimore. 2438 *Maryland Av.*
A. B., Johns Hopkins University, 1896.

PAUL GERHARDT WOOLLEY. Chicago, Ill. 1421 *McCulloh St.*
S. B., University of Chicago, 1896.

(43)

Second Year.

ALEXANDER MONTAGUE ATHERTON. Honolulu, Hawaii. 122 *Jackson Place.*
A. B., Wesleyan University (Conn), 1897.

FREDERICK HARRY BAETJER. Winchester, Va. 615 *Park Av.*
A. B., Johns Hopkins University, 1897.

WILLIAM DWIGHT BALDWIN. Haiku, Hawaii. 1757 *Jefferson St.*
A. B., Yale University, 1897.

JOHN MCWILLIAMS BERRY. Peterboro, N.Y. 1640 *E. Fayette St.*
S. B., Cornell University, 1897.

WALTER HERBERT BLAKESLEE. Coatesville, Pa. 1021 *McCulloh St.*
A. B., Amherst College, 1897; Student of Medicine, University of Pennsylvania, 1897-98.

HORACE DECHAMPS BLOOMBERGH. Easton, Pa. 1024 *N. Broadway.*
A. B., Lafayette College, 1897.

THOMAS RICHMOND BOGGS. Athens, Ga. 203 *W. Lanvale St.*
S. B., University of Georgia, 1896, and Graduate Student, 1896-97; Student of Medicine, University of Pennsylvania, 1897-98.

JOHN ROBERT BOSLEY. Baltimore. 1607 *Park Av.*
A. B., Western Maryland College, 1896; Graduate Student, Johns Hopkins University, 1896-97.

CHARLES HENRY BUNTING. La Crosse, Wis. 122 *Jackson Place.*
S. B., University of Wisconsin, 1896, and Graduate Student, 1896-97.

JOEL IVES BUTLER. Meriden, Conn. 112 *Jackson Place.*
Ph. B., Yale University, 1897.

HARRY WARDELL CAREY. Stamford, Conn. 432 *N. Broadway.*
A. B., Yale University, 1897.

WILLIAM MACK CHOWNING. Rock Island, Ill. 116 *Jackson Place.*
S. B., Knox College, 1894; A. B., Johns Hopkins University, 1896.

ROBERT THORNTON COMER. James, Ala. 1938 *McElderry St.*
A. B., University of Alabama, 1896; Graduate Student, Johns Hopkins University, 1896-97.

GUY LEARTUS CONNOR. Detroit, Mich. 1640 *E. Fayette St.*
A. B., Williams College, 1897.

RAY CONNOR. Detroit, Mich. 1640 *E. Fayette St.*
A. B., Williams College, 1897.

GEORGE SILAS DRAKE, JR. St. Louis, Mo. 432 *N. Broadway.*
A. B., Yale University, 1897.

ADELAIDE DUTCHER. Madison, Wis. 1923 *Jefferson St.*
S. B., University of Wisconsin, 1897.

HARRY ATWOOD FOWLER. Minneapolis, Minn. 1014 *N. Broadway.*
S. B., University of Minnesota, 1895; University of Chicago, Summer term, 1896.

FREDERICK PARKER GAY. Boston, Mass. 935 *St. Paul St.*
A. B., Harvard University, 1897.

NEIL DUNCAN GRAHAM. Falls Church, Va. 602 *N. Charles St.*
A. B., Johns Hopkins University, 1897.

GARDNER WELLS HALL. Newton, Mass. 1005 *N. Charles St.*
A. B., Harvard University, 1896.

LOUIS VIRGIL HAMMAN. Baltimore. 2500 *Madison Av.*
A. B., Rock Hill College, 1896; Graduate Student, Johns Hopkins University, 1896-97.

ROLLAND FREDERICK HASTREITER. Madison, Wis. 104 *Jackson Place.*
S. B., University of Wisconsin, 1897.

JOSEPH HENRY HATHAWAY. Grinnell, Iowa. 122 *Jackson Place.*
A. B., Iowa College, 1894; A. B., Harvard University, 1896, and A. M., 1897.

JAMES MORLEY HITZROT. McKeesport, Pa. *Govanstown.*
A. B., Princeton University, 1897.

GERRY ROUNDS HOLDEN. Baltimore. 1716 *N. Broadway.*
A. B., Yale University, 1897.

EDWARD HICKS HUME. Bombay, India. 1757 *Jefferson St.*
A. B., Yale University, 1897

WILLIAM BERNARD JOHNSTON. Washington, D. C. 1005 *N. Charles St.*
A. B., Harvard University, 1897.

HARRY M. KAUFMAN. Washington, D. C. 510 *N. Broadway.*
A. B., Johns Hopkins University, 1897.

ARTHUR HERBERT KIMBALL. Washington, D. C. 510 *N. Broadway.*
S. B., Amherst College, 1897.

THEODORE LAMSON. Hartford, Conn. 112 *Jackson Place.*
Ph. B., Yale University, 1897.

DWIGHT MILTON LEWIS. New Haven, Conn. 432 *N. Broadway.*
A. B., Yale University, 1897.

MARGARET LONG. Hingham, Mass. 1635 *N. Caroline St.*
A. B., Smith College, 1896; Student, Massachusetts Institute of Technology, 1896-97.

WARFIELD THEOBALD LONGCOPE. Baltimore. 136 *Richmond St.*
A. B., Johns Hopkins University, 1897.

ANNA GALLOWAY LYLE. San Francisco, Cal. 213 *W. Monument St.*
A. B., Leland Stanford Jr. University, 1895.

WILLIAM HARVEY MADDREN. Brooklyn, N. Y. 1024 *N. Broadway.*
S. B., Brooklyn Polytechnic Institute, 1896; Graduate Student, Johns Hopkins University, 1896-97.

EDWARD PATRICK MCKEOUGH. Hartford, Conn. 335 *St. Paul St.*
S. B., Villanova College (Pa.), 1894, and A. B., 1896; Graduate Student, Johns Hopkins University, 1896-97.

ELIZABETH SUTTON MOORE. Brookville, Pa. 118 *Jackson Place.*
S. B., Wilson College (Pa.), 1895; Graduate Student, Cornell University, 1896-97.

HENRY PICKERING PARKER. Howard County. *St. Denis P. O.*
A. B., Johns Hopkins University, 1896.

FRANCES KENNEY PULLEN. Paris, Ky. 238 *W. Hoffman St.*
A. B., Wellesley College, 1896.

MAURICE J. RUBEL. Chicago, Ill. 100 *Jackson Place.*
S. B., University of Chicago, 1897.

STEPHEN RUSHMORE. Plainfield, N. J. 1113 *Madison Av.*
A. B., Amherst College, 1897.

JOHN CLEVELAND SALTER. Carbondale, Ill. 432 *N. Broadway.*
A. B., Yale University, 1897.

MABEL PALMER SIMIS. Vail's Gate, N. Y. 1635 *N. Caroline St.*
S. B., Cornell University, 1897.

JOSIAH MORRIS SLEMONS. Salisbury. 1024 *N. Broadway.*
A. B., Johns Hopkins University, 1897.

HERBERT MELOY SMITH. Salem, Va. 1014 *N. Broadway.*
A. B., Roanoke College, 1892, and A. M., 1897; Student, Johns Hopkins University, 1894-95.

CHARLES NELSON SPRATT. Minneapolis, Minn. 821 *N. Broadway.*
S. B., University of Minnesota, 1897.

GERTRUDE STEIN. Baltimore. 215 *E. Biddle St.*
A. B., Radcliffe College, Harvard University, 1898.

ALBERT LOUIS STEINFELD. Baltimore. 318 *N. Carey St.*
A. B., Johns Hopkins University, 1897.

CARLOTTA MARY SWETT. Bangor, Me. 238 *W. Hoffman St.*
A. B., Wellesley College, 1896; Student, Maine State College, Summer of 1896.

HENRY LUDWIG ULRICH. Newark, N. J. 806 *N. Broadway.*
S. B., Rutgers College, 1897.

ALBERT JAMES UNDERHILL. Baltimore. *Walbrook.*
A. B., Johns Hopkins University, 1897.

MARION BARTHOLOW WALKER. Cambridge, Mass. 122 *Jackson Place.*
A. B., Radcliffe College, Harvard University, 1898.

LOUIS MARSHALL WARFIELD. Savannah, Ga. 13 *E. Franklin St.*
A. B., Johns Hopkins University, 1897.

GEORGE WILLIAM WARREN. Portland, Me. 1014 *N. Broadway.*
A. B., Johns Hopkins University, 1897.

STEPHEN HURT WATTS. Lynchburg, Va. 804 *N. Broadway.*
A. M., Randolph-Macon College, 1896; Student, University of Virginia, 1896-97.

ERNEST ALDEN WELLS. Hartford, Conn. 527 *N. Wolfe St.*
A. B., Yale University, 1897.

MABEL WELLS. Monticello, Ark. 1104 *Brevard St.*
A. B., Wellesley College, 1896; Student, University of Zürich, 1897.

CHARLES KNICKERBACKER WINNE, JR. Baltimore. 1624 *Linden Av.*
A. B., Johns Hopkins University, 1897.

(89)

First Year.

JOHN AUER. Chicago, Ill. 100 *Jackson Place.*
S. B., University of Michigan, 1898.

JOHN BRADFORD BRIGGS, JR. Baltimore. 819 *Park Av.*
S. B., New York University, 1898.

BENNET BERNARD BROWNE, JR. Baltimore. 510 *Park Av.*
A. B., Johns Hopkins University, 1896.

ROBERT MARTIN BRUNS. New Orleans, La. 1401 *Park Av.*
A. B., University of Virginia, 1896; Student, Johns Hopkins University, 1897-98.

WILLIAM MORGAN CASE BRYAN. St. Louis, Mo. 1024 *N. Broadway.*
A. B., Washington University, 1897; M. S., University of Michigan, 1898.

CAMILLUS BUSH. Woodland, Cal. 106 *W. Saratoga St.*
S. B., University of California, 1896.

LOUIS ALBERT CHASE. Plainfield, N. J. 144 *Jackson Place.*
Ph. B., Yale University, 1898.

JOHN WOOLMAN CHURCHMAN. Burlington, N. J. 802 *N. Broadway.*
A. B., Princeton University, 1898.

THOMAS WOOD CLARKE. Utica, N. Y. 144 *Jackson Place.*
Harvard University.†

HENRY WIREMAN COOK. Baltimore. *The St. Paul.*
A. B., Johns Hopkins University, 1898.

JACOB JONES COONS. Milledgeville, O. 618 *N. Calvert St.*
S. B., Ohio Wesleyan University, 1898.

JOHN CROSSAN COOPER. Pittsburg, Pa. *The Severn.*
A. B., Princeton University, 1885; LL. B., Columbia University, 1887; Graduate Student, Johns Hopkins University, 1897-98.

GUSTAVUS CHARLES DOHME. Baltimore. 1527 *N. Caroline St.*
A. B., Johns Hopkins University, 1898.

DAVID HOUGH DOLLEY. Hillsboro, Va. 909 *N. Wolfe St.*
A. B., Randolph-Macon College, 1897, and A. M., 1898.

HARLAN DUDLEY. Monroeville, O. 909 *N. Broadway.*
Ph. B., Oberlin College, 1897; Graduate Student, Johns Hopkins University, February to June, 1898.

RALPH DUFFY. Baltimore. 1610 *Park Av.*
A. B., Johns Hopkins University, 1898.

JOHN DUNLOP. Washington, D. C. 626 *N. Broadway.*
S. B., Princeton University, 1898.

† All the courses required for the degree of A. B. in Harvard University have been completed by Mr. Clarke. The diploma will be granted in June, 1899.

DANA LEE EDDY. Leavenworth, Kan. 1757 *Jefferson St.*
A. B., Yale University, 1898.

WILLIAM GEORGE ERVING. Hartford, Conn. 1727 *Fairmount Av.*
A. B., Yale University, 1898.

NEWELL SIMMONS FERRY. New Haven, Conn. 144 *Jackson Place.*
Ph. B., Yale University, 1898.

CLYDE VAN NUYS FOGLE. Eugene, Ore. 1734 *E. Fayette St.*
A. B., University of Oregon, 1898.

NELLIS BARNIS FOSTER. Utica, N. Y. 805 *N. Broadway.*
S. B., Amherst College, 1898.

WILLIAM WILLOUGHBY FRANCIS. Toronto, Ont. 1 *W. Franklin St.*
A. B., Johns Hopkins University, 1898.

MAURICE ALBERT FRANKENTHAL. St. Louis, Mo. 2036 *Linden Av.*
A. B., Washington University, 1898.

JOHN TIMOTHY GERAGHTY. St. Paul, Minn. 1042 *N. Eden St.*
A. B., St. Thomas College, 1895; Ph. B., St. Paul Seminary, 1897; Graduate Student, Johns Hopkins University, 1897-98.

W. HARRY GLENNY. Buffalo, N. Y. 1013 *Cathedral St.*
Ph. B., Yale University, 1894, and Graduate Student, 1897-98.

JUSTIN FRANK GRANT. Stamford, Conn. 144 *Jackson Place.*
Ph. B., Yale University, 1898.

MORRISON LE ROY HAVILAND. Glen's Falls, N. Y. 805 *N. Broadway.*
Ph. B., Union College, 1898.

MABEL STEVENS HAYNES. Boston, Mass. *The St. Paul.*
A. B., Bryn Mawr College, 1898.

LEONARD KEENE HIRSHBERG. Baltimore. 581 *N. Gay St.*
A. B., Johns Hopkins University, 1898.

CARL HERMAN HORST. Butte City, Mont. 700 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1898.

SOLOMON HYMAN. San Francisco, Cal. 128 *Jackson Place.*
S. B., University of California, 1898.

WILLIAM FREDERICK JELKE. Cincinnati, O. 1709 *Park Av.*
Ph. B., Yale University, 1898.

THOMAS MONROE JONES. Anderson, Ind. 700 *N. Broadway.*
A. B., Indiana University, 1898.

ALFRED KARSTED. Butte City, Mont. 608 *N. Bond St.*
A. B., Leland Stanford Jr. University, 1898.

LOUIS CHARLES LEHR. Baltimore. 12 *E. Chase St.*
A. B., Johns Hopkins University, 1898.

EDWARD MCCRADY L'ENGLE. Baltimore. 13 *E. Preston St.*
A. B., St. John's College, 1897; Graduate Student, Johns Hopkins University, 1897-98.

MAUDE WINTHROP LINCOLN. Boston, Mass. 129 *Jackson Place.*
A. B., Radcliffe College, Harvard University, 1898.

GEORGE VICTOR LITCHFIELD, JR. Abingdon, Va. 1731 *Fairmount Av.*
A. M., Randolph-Macon College, 1897.

EMMA LOOTZ. Boston, Mass. 1709 *Fairmount Av.*
A. B., Smith College, 1897.

SEYMOUR DE WITT LUDLUM. Paterson, N. J. 909 *N. Broadway.*
S. B., Rutgers College, 1897.

GEORGE MALCOLM MACGREGOR. Lancaster, Wis. 121 *Jackson Place.*
S. B., University of Wisconsin, 1898.

SAMUEL ANDREW MARSHALL. Cromwell, Conn. 1727 *Fairmount Av.*
A. B., Yale University, 1896.

JOHN SCOTT MCFARLAND. Buffalo, N. Y. 116 *Jackson Place.*
Ph. B., Yale University, 1898.

EDMUND WEBSTER MEISENHELDER. York, Pa. 505 *N. Wolfe St.*
A. B., Pennsylvania College, 1896; Harvard Summer School, 1898.

JOHN ELMER MEISENHELDER. Hanover, Pa. 505 *N. Wolfe St.*
S. B., Pennsylvania College, 1897; Graduate Student, Johns Hopkins University, 1897-98.

HENRY WILLIAM OCHSNER. Waumandee, Wis. 121 *Jackson Place.*
S. B., University of Wisconsin, 1898.

GARNET ISABEL PELTON. Colorado Springs, Colo. 1033 *Cathedral St.*
A. B., Wellesley College, 1897.

EDWARD HIRAM REEDE. Albion, N. Y. 1042 *N. Eden St.*
A. B., Cornell University, 1898.

EDWIN NICHOLAS RIGGINS. East Orange, N. J. 1640 *E. Fayette St.*
A. B., Williams College, 1897.

THEODORE FOSTER RIGGS. Oahe, S. Dak. 706 *N. Broadway.*
A. B., Beloit College, 1898.

CAREY PEGRAM ROGERS. Apex, N. C. 849 *N. Eutaw St.*
A. B., Wake Forest College, 1897; Graduate Student, Johns Hopkins University, 1897-98.

GEORGE BARR SCHOLL. Baltimore. 1005 *W. Lanvale St.*
A. B., Johns Hopkins University, 1898.

MELVILLE SILVERBERG. San Francisco, Cal. 1013 *Madison Av.*
A. B., University of California, 1897.

JOHN NATHAN SIMPSON. Point Pleasant, W. Va. 700 *N. Broadway.*
A. B., University of Nashville, 1893.

ALICE WELD TALLANT. Boston, Mass. 1709 *Fairmount Av.*
A. B., Smith College, 1897; Student, Massachusetts Institute of Technology, 1897-98.

CONDIT BREWER VAN ARSDALL. Harrodsburg, Ky. 1225 *Park Terrace.*
A. B., Kentucky Wesleyan College, 1894, and A. M., 1896; A. B., University of Michigan, 1898.

JOHN VAN DENBURGH. San Francisco, Cal. 813 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1894, A. M., 1896, and Ph. D., 1897.

OTIS BUCKMINSTER WIGHT. Stanford University, Cal. 813 *N. Broadway.*
A. B., Leland Stanford Jr. University, 1898.

CLARA LOUISE WILLIAMS. San Francisco, Cal. 129 *Jackson Place.*
S. B., University of California, 1897, and M. S., 1898.

DUDLEY WILLIAMS. Baltimore. 1128 *Cathedral St.*
A. B., Johns Hopkins University, 1897, and Graduate Student, 1897-98.

CHARLES BENJAMIN WRIGHT. Grand Forks, N. Dak. 1042 *N. Eden St.*
A. B., University of North Dakota, 1898.

(62)

Physicians Attending Special Courses.

James Joseph Carroll. Baltimore. 114 *W. Franklin St.*
M. D., University of Maryland, 1893. *Special Research.*

Claribel Cone. Baltimore. 1607 *Eutaw Place.*
M. D., Woman's Medical College (Balt.), 1890. *Special Research.*

Rozel M. Curtiss. Marengo, Ill. 1255 *N. Broadway.*
M. D., College of Physicians and Surgeons (Chicago), 1884. *Normal Histology.*

Thomas Fearn. Mobile, Ala. 13 *W. Preston St.*
M. D., University of Maryland, 1890. *Special Research.*

Edward C. Greenebaum. Chicago, Ill. *The Broadway.*
M. D., Rush Medical College, 1897. *Pathology and Medicine.*

Edwin K. Johnson. New York City. 1324 *Eutaw Place.*
Harvard University. *Histology and Embryology.*

Thomas S. Lee. New York City.
A. B., Harvard University, 1891; M. D., College of Physicians and Surgeons (N. Y.), 1894. *Special Research.*

Dorsey Mason. Houston, Texas. 700 *N. Broadway.*
M. D., University of Louisiana, 1874. *Gynecology.*

Robert Reuling. Baltimore. 103 *W. Monument St.*
M. D., Baltimore Medical College, 1894. *Special Research.*

Herbert Lowell Rich. Boston, Mass. 1319 *Linden Av.*
M. D., Tufts Medical College, 1898. *Gynecology, Pediatrics, and Physiology.*

Louise Tayler. Washington, D. C. 1014 *N. Broadway.*
A. B., Wellesley College, 1896. *Physiological Chemistry.*

(11)

Physicians Attending Special Courses, May–June, 1898.

[Not enrolled in the Register for 1897–98].

Frank G. Atwood. New Haven, Conn.
M. B., University of Toronto, 1896. *Surgery and Gynecology.*

Charles W. Blagden. Sanford, Me.
M. D., College of Physicians and Surgeons (Balt.), 1894. *Medicine, Surgery, Gynecology, and Special Depts.*

William J. Boyd. Denver, Colo.
M. D., University of Buffalo, 1895. *Bacteriology and General Medicine.*

R. Anna Breed. Philadelphia, Pa.
M. D., Woman's College of Pennsylvania, 1892. *Medicine and Gynecology.*

Edgar B. Britton. Baltimore.
M. D., Pulte Medical College (Cincinnati), 1878. *Ophthalmology and Otology.*

Adelaide Brown. San Francisco, Cal.
M. D., Cooper Medical College, 1892. *Medicine, Gynecology, Pathology, and Clinical Microscopy.*

Anna L. Church. Glasgow, Scotland.
M. B., Royal University of Ireland, 1892. *Medicine, Surgery, Gynecology, Pathology, and Clinical Microscopy.*

MALVERN B. CLOPTON. St. Louis, Mo.
M. D., University of Virginia, 1897. *Pathology, Bacteriology, and Clinical Microscopy.*

ANDREW J. COEY. Chicago, Ill.
M. D., Northwestern University, 1880. *Medicine, Pathology, Clinical Microscopy, and Bacteriology.*

JOHN R. COOK. Watson, W. Va.
M. D., Jefferson Medical College, 1884. *Surgery, Gynecology, and Clinical Microscopy.*

WILLIAM E. COSTELLO. Zwingle, Iowa.
M. D., State Univ. of Iowa. *Medicine, Surgery, Gynecology, and Special Depts.*

JOHN A. CROWTHER. Savannah, Ga.
M. D., University of Virginia, 1895. *Surgery.*

THOMAS J. DAVIS. Davis Station, S. C.
M. D., College of Physicians and Surgeons (Balt.), 1898. *Gynecology.*

JOHN H. DENNARD. Fitzgerald, Ga.
M. D., Atlanta Medical College, 1893. *Surgery and Gynecology.*

WILLIAM L. ELLIS. St. John, New Brunswick.
M. D., McGill University, 1895. *Medicine.*

EDGAR H. GUILD. Springfield, Mass.
M. D., University of Pennsylvania, 1862. *Pathology and Bacteriology.*

CHARLES W. HARTLOFF. Evansville, Ind.
M. D., University of Michigan, 1897. *Medicine, Surgery, Gynecology, and Clinical Microscopy.*

EDGAR A. HINES. Seneca, S. C.
M. D., Medical College of South Carolina, 1891. *Gynecology.*

LOUISE D. HOLMES. Baltimore.
M. D., Laura Memorial Woman's Medical College (Cincinnati), 1896. *Gynecology.*

NATHANIEL G. KEIRLE, JR. Baltimore.
Bacteriology and Clinical Microscopy.

ANNA L. KUHN. Baltimore.
M. D., Woman's Medical College (Balt.), 1883. *Gynecology.*

SAMUEL P. LATANE. Baltimore.
M. D., University of Maryland, 1897. *Pathology and Bacteriology.*

BENJAMIN F. LEONARD. Nova Scotia.
M. D., College of Physicians and Surgeons (Balt.), 1897. *Medicine, Surgery, Gynecology, and Special Depts.*

E. K. LOCKWOOD. Virden, Ill.
Medicine, Gynecology, and Clinical Microscopy.

BENJAMIN E. MARTIN. Laurens, S. C.
M. D., Georgia Medical University, 1868. *Gynecology.*

IRVING MILLER. Baltimore.
M. D., University of Maryland, 1877. *Gynecology.*

LOUIS W. MORRIS. Salisbury.
M. D., University of Maryland, 1885. *Medicine, Surgery, Gynecology, Pathology, and Special Departments.*

F. ALAN G. MURRAY. Baltimore.
M. D., University of Maryland, 1897. *Pathology.*

CHARLES W. NILES. Calumet, Mich.
M. D., Detroit Medical College, 1872. *Pathology and Clinical Microscopy.*

ADELAIDE W. PECKHAM. Philadelphia, Pa.
M. D., Woman's Medical College of the New York Infirmary, 1886. *Pathology and Clinical Microscopy.*

ALLAN RAMSAY. Cincinnati, O.
M. D., Ohio Medical College, 1896. *Pathology and Bacteriology.*

CHARLES A. RAY. Winifrede, W. Va.
M. D., College of Physicians and Surgeons (Balt.), 1887. *Medicine and Surgery.*

WILLIAM E. SANDERS. Alta, Iowa.
M. D., Marion Sims College (St. Louis), 1893. *Pathology.*

MAXWELL E. SILVER. Sioux City, Iowa.
M. D., College of Physicians and Surgeons (Balt.), 1897. *Bacteriology and Clinical Microscopy.*

EDNA STEINHARDT. New York City.
M. D., Woman's Medical College of the New York Infirmary, 1895. *Medicine, Pathology, Bacteriology, and Clinical Microscopy.*

JAMES EDGAR STUDEBAKER. Springfield, O.
M. D., Pulte Medical College (Cincinnati), 1879. *Bacteriology and Clinical Microscopy.*

LOUISE TAYLER. Washington, D. C.
A. B., Wellesley College, 1895. *Pathology.*

WILLIAM J. TODD. Mt. Washington.
M. D., College of Physicians and Surgeons (Balt.), 1889. *Clinical Microscopy.*

ALBERT H. VAN VLEET. Madison, Wis.
Ph. D., University of Leipsig, 1897. *Bacteriology.*

ARTHUR E. WALKER. Argonia, Kan.
M. D., Indiana Medical College, 1892. *Medicine, Surgery, and Clinical Microscopy.*

OTTO A. WALL, JR., St. Louis, Mo.
M. D., Missouri Medical College, 1898. *Pathology and Bacteriology.*

HALLEY M. WENNER. Nanticoke, Pa.
M. D., College of Physicians and Surgeons (Balt.), 1892. *Surgery and Gynecology.*

SARAH WHITESIDE. Baltimore.
M. D., Woman's Medical College (Phila.), 1894. *Medicine, Gynecology, and Special Departments.*

PIERRE WILSON. Denison, Texas.
M. D., Missouri Medical College, 1884. *Gynecology.*

JAMES J. WINGARD. Lexington, S. C.
M. D., University of Virginia, 1895. *Medicine and Surgery.*

(45)

UNDERGRADUATE STUDENTS.

MATRICULATES.

ROGER BROOKE TANEY ANDERSON. Baltimore. 723 *N. Calvert St.*
Private Instruction. *Group I.*

JAMES ROBERT CHARLTON ARMSTRONG. Baltimore. 2430 *Madison Av.*
Mr. C. Maupin, Instructor. *Group II.*

HOWARD BAETJER. Baltimore. 2324 *Callow Av.*
Baltimore City College. *Group II.*

CHRISTIAN JOHN BEEUWKES. Baltimore. 2005 *Druid Hill Av.*
Baltimore City College. *Group VI.*

BERTRAM MOSES BERNHEIM. Louisville, Ky. 209 *W. Madison St.*
Mr. Flexner's School. *Group VI.*

HENRY BOGUE. Baltimore. 843 *Park Av.*
Loyola College. *Group I.*

JOHN MANNING BOOKER. Baltimore. 853 *Park Av.*
Mr. Marston's School. *Group I.*

BYRON NOBLE BOUCHELLE. Chesapeake City. 1814 *N. Charles St.*
St. John's College. *Group III.*

NORMAN BOYER. Baltimore. 1526 *McCulloh St.*
Baltimore City College, 1896. *Group VI.*

AUSTIN ADAMS BREED. Cincinnati, O. 8 *W. Preston St.*
Franklin School. *Group III.*

JOHN STRAITH BRISCOE. Baltimore. 12 *W. North Av.*
Baltimore City College, 1896. *Group I.*

CHARLES EDWARD BROOKS. Baltimore County. *Lake Roland.*
Mr. Marston's School. *Group II.*

JAMES LUTHER ALBERT BURRELL. Baltimore. 2024 *Maryland Av.*
Mr. Marston's School. *Group I.*

HARRY STEPHENSON BYRNE. Baltimore. 422 *Mosher St.*
Baltimore City College, 1896. *Group VI.*

LYTTLETON MORGAN CHAMBERS. Baltimore. 317 *Falls Road, Hampden.*
Baltimore City College. *Group I.*

CHRISTOPHER THOMPSON CLARK. Washington, D. C. 1314 *McCulloh St.*
Dr. Deichmann's School. *Group VI.*

FRANK JACLARD CLUNET. Baltimore. 815 *N. Howard St.*
Mr. C. Maupin. *Group VII.*

COSEY WALKER CONSTANTINE. Birmingham, Ala. 1901 *Park Av.*
Webb School (Tenn.). *Group III.*

GEORGE DIUGUID DAVIDSON. Baltimore. 614 *N. Monroe St.*
Dr. Deichmann's School. *Group VII.*

MCQUILKIN DE GRANGE. Frederick. 1530 *Linden Av.*
Frederick College. *Group VI.*

HENRY CARTER DOWNES. Baltimore. 1527 *Park Av.*
Baltimore City College, 1896. *Group VI.*

JOHN HOWARD EAGER, JR. Baltimore. 1314 *McCulloh St.*
Mr. Lamb's School. *Group I.*

JOHN EDWARD EWELL. Baltimore. 1126 *Mosher St.*
Mr. Lamb's School. *Group I.*

LEYBURN GREAR FISHACH. Baltimore. 432 *E. North Av.*
Baltimore City College, 1898. *Group I.*

FERDINAND COLQUHOUN FISHER. Baltimore. 746 *W. North Av.*
Dr. Deichmann's School. *Group I.*

WALTER MELVIN FOOKS. Baltimore. 1519 *E. Baltimore St.*
Mr. Lamb's School. *Group VI.*

EDDY BURKE FOSNOCHT. Baltimore. 342 *W. Biddle St.*
Wilmington Conference Academy. *Group VII.*

FREDERICK FOSTER. Baltimore. 2301 *N. Charles St.*
Mr. Marston's School. *Group II.*

ISAAC HATHAWAY FRANCIS, JR. Baltimore County. *St. Denis P. O.*
Baltimore City College, 1897. *Group II.*

SIMON WALTER FRANK. Baltimore. 1506 *Eutaw Place.*
Private Instruction. *Group VI.*

JOHN CALVIN FRENCH. Baltimore. 1505 *W. Lombard St.*
Dr. Deichmann's School. *Group I.*

CHARLES CARTER GADDESS. Baltimore. 2739 *St. Paul St.*
Mr. Lamb's School. *Group VI.*

JOHN REED GEMMILL. York, Pa. 849 *N. Eutaw St.*
York Collegiate Institute. *Group VI.*

OTTO CHARLES GLASER. Baltimore. 2135 *Bolton St.*
Baltimore City College. *Group III.*

HARRY SELIGER GREENBAUM. Baltimore. 1614 *Eutaw Place.*
Baltimore City College, 1896. *Group III.*

JOSEPH DAVID GREENE. Lake Benton, Minn. 1615 *John St.*
University of Minnesota. *Group V.*

JOHN WHEELER GRIFFIN. Baltimore. 1027 *N. Calvert St.*
Mr. Marston's School. *Group I.*

ROBERT HAROLD GRIMES. Baltimore. 2100 *Maryland Av.*
Mr. Marston's School. *Group VI.*

CLARENCE MAURICE GUGGENHEIMER. Baltimore. 1704 *Madison Av.*
Mr. Marston's School. *Group VI.*

HUGH SISSON HANNA. Baltimore. 1037 *Harlem Av.*
Mr. Lamb's School. *Group VI.*

STEPHEN PAUL HARWOOD. Baltimore. 8 *W. Preston St.*
The Carey School. *Group III.*

LOUIS WARDLAW HASKELL, JR. Savannah, Ga. 1002 *Cathedral St.*
Private Instruction. *Group III.*

STUART HEYMAN. Baltimore. 2015 *Madison Av.*
Mr. Marston's School. *Group VI.*

HARRY DICKINSON HILL. Baltimore. 807 *N. Arlington Av.*
Mr. Lamb's School. *Group VII.*

JOHN PHILIP HILL. Baltimore. 2120 *N. Charles St.*
Mr. Marston's School. *Group VI.*

LEE MILTON HOLLANDER. Baltimore. 1013 *Madison Av.*
Real-Gymnasium, Frankfort, Germany. *Group VII.*

EDWARD PECHIN HYDE. Baltimore. 1100 *E. North Av.*
Baltimore City College, 1897. *Group II.*

ANDREW DICKSON JONES, JR. Baltimore. 1208 *St. Paul St.*
Dr. Deichmann's School. *Group VI.*

TALBOT DICKSON JONES. Baltimore County. *Relay.*
Private Instruction. *Group VI.*

LEON LEWIS JOYNER. Baltimore. 1521 *Edmondson Av.*
Baltimore City College, 1896. *Group VI.*

KARL JUNGBLUTH, JR. Louisville, Ky. 1002 *Cathedral St.*
Mr. A. Flexner, Instructor. *Group VI.*

MARION JUNGBLUTH. Louisville, Ky. 1002 *Cathedral St.*
Mr. A. Flexner, Instructor. *Group III.*

JOHN ALBERT KALB. Catonsville. *Catonsville.*
Maryland Normal School. *Group V.*

ALBERT KEIDEL. Catonsville. *Catonsville.*
Mr. Marston's School. *Group III.*

ROBERT CLARK KERR. Baltimore. 105 *E. Twenty-first St.*
Baltimore City College. *Group II.*

JOHN HENDRICKEN KING. Baltimore. 1529 *Bolton St.*
Mr. Marston's School. *Group I.*

GEORGE WROTH KNAPP, JR. Baltimore. 1232 *W. Lafayette Av.*
Mr. Lamb's School. *Group VI.*

WALTER MARSHALL KRAGER. Baltimore. *The Condon.*
Baltimore City College, 1895. *Group VI.*

HERMAN KURRELMEYER. Baltimore. 512 *N. Carrollton Av.*
Baltimore City College, 1896. *Group VII.*

MAURICE LAZENBY. Baltimore. 800 *W. North Av.*
Mr. Marston's School. *Group III.*

EUGENE JOSEPH LEOPOLD. Baltimore. 1227 *Madison Av.*
Baltimore City College. *Group III.*

JOSHUA LEVERING, JR. Baltimore. 1316 *Eutaw Place.*
Mr. Marston's School. *Group VI.*

DONALD MACY LIDDELL. Denver, Colo. 1314 *McCulloh St.*
Denver High School. *Group II.*

NORVIN RUDOLF LINDHEIM. Greensboro, N. C. 1704 *Madison Av.*
Mr. Marston's School. *Group VI.*

JOHN GRESHAM MACHEN. Baltimore. 217 *W. Monument St.*
Mr. Marston's School. *Group I.*

LEONARD LEOPOLD MACKALL. Baltimore. 1002 *Cathedral St.*
Lawrenceville School. *Group II.*

HENRY MANKEN, JR. Baltimore. 3 *S. Collington Av.*
Baltimore City College, 1897. *Group I.*

T. HARTLEY MARSHALL. Pikesville. 887 *Park Av.*
Mr. Marston's School. *Group VI.*

JARED SPARKS MOORE. Baltimore. 1303 *N. Calvert St.*
Mr. Marston's School. *Group VI.*

PHILIP SIDNEY MORGAN. Baltimore. *Walbrook.*
William Penn Charter School (Phila.). *Group III.*

ROBERT BROOKS MORSE. Baltimore. 726 *Reservoir St.*
Baltimore City College. *Group II.*

JAMES MORFIT MULLEN. Baltimore. 1223 *Maryland Av.*
Mr. Marston's School. *Group VI.*

PHILIP AUSTEN MURKLAND. Baltimore. 502 *Cathedral St.*
Dr. Deichmann's School. *Group I.*

EUGENE LEVERING NORTON. Baltimore. 2438 *Maryland Av.*
Mr. Marston's School. *Group VI.*

EDWARD LIVINGSTON PALMER, JR. Baltimore. 2420 *Eutaw Place.*
Dr. Deichmann's School. *Group III.*

JOHN HOWARD PALMER. Baltimore. *Roland Park.*
Dr. Deichmann's School. *Group VII.*

JAMES GIRVIN PETERS. Baltimore. 1117 *McCulloh St.*
Mr. Marston's School. *Group VI.*

MILTON WILLIAMS POWELL. Baltimore. 2239 *Bank St.*
Milton Academy. *Group IV.*

HUGH WHITE SHEFFEY POWERS. Towson. *Towson.*
Warfield College School. *Group I.*

TOBIAS NOËL DELOUGHMOE PURCELL. Sykesville. 718 *N. Howard St.*
Private Instruction. *Group I.*

GEORGE EDWARD REHBERGER. Baltimore. 1709 *Aliceanna St.*
Baltimore City College, 1896. *Group III.*

CHARLES MALLORY REMSEN. Baltimore. 12 *E. Biddle St.*
Mr. Marston's School. *Group IV.*

LAWRENCE ANTON REYMANN. Wheeling, W. Va. 201 *W. Madison St.*
Linsley Institute (Wheeling). *Group VI.*

EDWARD AYRAULT ROBINSON, JR. Baltimore. *Mt. Washington.*
Mr. Marston's School. *Group VI.*

GEORGE CANBY ROBINSON. Baltimore. *Mt. Washington.*
Mr. Marston's School. *Group III.*

WILLIAM LEAVELL ROSS. Hedgesville, W. Va. 1128 *McCulloh St.*
Private Instruction. *Group I.*

ROBERT BRUCE ROULSTON. Baltimore. 628 *N. Arlington Av.*
Baltimore City College, 1897. *Group V.*

FRANK PEYTON ROUS. Baltimore. 252 *W. Hoffman St.*
Private Instruction. *Group III.*

JAMES EDWARD ROUTH. Petersburg, Va. 1223 *Maryland Av.*
Private Instruction. *Group II.*

ALEX. VANRENSSELAER SCHERMERHORN. Baltimore. 632 *W. North Av.*
Private Instruction. *Group VI.*

OLEN FORREST SHREVE. Easton. 249 *W. Hoffman St.*
Private Instruction. *Group III.*

MILTENBERGER NEALE SMULL. Baltimore. 102 *E. Twentieth St.*
Dr. Deichmann's School. *Group VII.*

GUY EVERETT SNAVELY. Private Instruction. *Group I.*	Baltimore County.	*Fork P. O.*
LINDSAY COLEMAN SPENCER. Mr. Marston's School. *Group I.*	Baltimore.	1118 *N. Calvert St.*
EDWIN ALBERT SPILMAN. Dr. Deichmann's School. *Group I.*	Baltimore.	815 *N. Arlington Av.*
HENRY PHILIP STRAUS. Baltimore City College, 1898. *Group II.*	Baltimore.	1217 *N. Calvert St.*
OTTO ALBERT STRUTH. Baltimore City College, 1898. *Group III.*	Baltimore.	133 *W. Camden St.*
WALTER B. SWINDELL, JR. Mr. Marston's School. *Group III.*	Baltimore.	1022 *W. Lafayette Av.*
GEORGE LANE TANEYHILL, JR. Mr. Marston's School. *Group III.*	Baltimore.	1103 *Madison Av.*
RENÉ TAVEAU. Dr. Deichmann's School. *Group III.*	Baltimore.	117 *W. Lafayette Av.*
RICHARD HENRY THOMAS. Baltimore City College, 1896. *Group III.*	Baltimore.	1710 *Bolton St.*
BAYARD TURNBULL. Mr. Marston's School. *Group VII.*	Baltimore.	1530 *Park Av*
JAMES EDWARD TYLER, JR. Mr. Marston's School. *Group VI.*	Baltimore.	1303 *Linden Av.*
JAMES DE LANCEY VER PLANCK. Private Instruction. *Group II.*	Fishkill, N. Y.	209 *W. Madison St.*
OTTOMAR SIEGMUND WERBER. Dr. Deichmann's School. *Group III.*	Baltimore.	924 *N. Calvert St.*
CAROL WIGHT. Private Instruction. *Group I.*	Brooklyn, N. Y.	1211 *Madison Av.*
MILLER WINGERT. Washington County High School. *Group VI.*	Hagerstown.	1120 *Linden Av.*
NATHAN WINSLOW. Mr. Marston's School. *Group III.*	Baltimore.	1900 *Mt. Royal Terrace.*

Candidates for Matriculation.

RONALD TAYLOR ABERCROMBIE. Private Instruction. *Group III.*	Baltimore.	827 *N. Eutaw St.*
LEON KAHN BALDAUF. Dr. Deichmann's School. *Group III.*	Henderson, Ky.	714 *Park Av.*
JOHN MARTIN BANDEL. Mr. C. Maupin, Instructor. *Group II.*	Baltimore.	1613 *Linden Av.*
ANDREW REID BIRD. Bellevue High School, Va. *Group VI.*	Baltimore.	8 *E. Biddle St.*
JAMES HENRY BRADY, JR. Private Instruction. *Group VI.*	Baltimore.	100 *E. North Av.*
JACOB BRAUN. Dr. Deichmann's School. *Group III.*	Baltimore.	2121 *Callow Av.*

ERNEST BONSALL BROWN.	Church Hill.	906 *McCulloh St.*
Dr. Deichmann's School. *Group VI.*		
EDWARD SKIPWITH BRUCE.	Baltimore.	1112 *N. Calvert St.*
Mr. Marston's School. *Group VI.*		
ALFRED WILLIAM BRUTON.	Baltimore.	804 *W. North Av.*
Mr. Lamb's School. *Group II.*		
MORTIMER BYE.	Baltimore.	733 *N. Fulton Av.*
Baltimore City College. *Preliminary Year.*		
THOMAS GROTJAN COOK.	Baltimore.	*The St. Paul.*
Private Instruction. *Preliminary Year.*		
FRANK HOWARD CRONIN.	Harford County.	1112 *N. Eutaw St.*
Dr. Deichmann's School. *Group II.*		
FREDERICK RICHARD DAPPRICH.	Milwaukee, Wis.	*Catonsville.*
Milwaukee High School. *Preliminary Year.*		
CHARLES FRANCIS DIGGS, JR.	Baltimore County.	*Howardville.*
Private Instruction. *Group VI.*		
ROBERT SERGEANT DUCK.	Baltimore.	*W. North Av. and Second St.*
Dr. Deichmann's School. *Group VI.*		
AARON EMBER.	Baltimore.	800 *E. Lombard St.*
Private Instruction. *Group VII.*		
BERNARD LIGHTFOOT FENWICK.	Baltimore.	118 *W. Lanvale St.*
Mr. W. S. Sleeman, Instructor. *Preliminary Year.*		
FREDERICK BONNER FLINN.	Worcester, Mass.	1313 *Madison Av.*
Worcester Polytechnic Institute. *Group III.*		
CHARLES ELIAS FORD, JR.	Baltimore County.	*Pikesville.*
Mr. Lamb's School. *Group II.*		
EDWIN JEROME GRIFFIN, JR.	Baltimore.	2212 *E. Pratt St.*
Dr. Deichmann's School. *Group VI.*		
WILLIE ALLEN GRIFFITH.	Upper Marlboro.	321 *N. Paca St.*
Dr. Deichmann's School. *Group III.*		
WILLIAM HALL HARRIS, JR.	Baltimore.	511 *Park Av.*
Dr. Deichmann's School. *Group VI.*		
ERNEST CUMMINS HATCH.	Lutherville.	*Lutherville.*
Baltimore Polytechnic Institute. *Group II.*		
HENRY HONEYMAN HAZEN.	Washington, D. C.	1810 *Park Av.*
Washington High School. *Preliminary Year.*		
WILLIAM BRYANT HILL.	Harford County.	1302 *McCulloh St.*
Private Instruction. *Preliminary Year.*		
HARRY LOUIS HOMER.	Baltimore County.	*Sherwood.*
Baltimore Polytechnic Institute. *Group VI.*		
WILLIAM MCCULLY JAMES.	Reisterstown.	807 *N. Calvert St.*
Mr. Marston's School. *Group II.*		
WALTER ISAAC KOHN.	Louisville, Ky.	209 *W. Madison St.*
Mr. Flexner's School. *Group VI.*		
WETHERED LUDLOW LILLY.	Baltimore.	19 *W. Preston St.*
Boys' Latin School. *Preliminary Year.*		
SYLVAN JOSEPH LISBERGER.	Danville, Va.	1017 *Madison Av.*
Private Instruction. *Preliminary Year.*		
EDWARD LOWNDES.	Baltimore County.	*Relay.*
Boys' Latin School. *Group VII.*		

ROBERT MITCHELL MAURY.	Memphis, Tenn.	1114 *McCulloh St.*
Phillips Exeter Academy. *Preliminary Year.*		
REGINALD LEY MCALL.	Redhill, England.	509 *N. Carey St.*
Weymouth College (England). *Group III.*		
HENRY CLAY MILLER.	Baltimore.	1009 *N. Charles St.*
Milton Academy. *Group V.*		
FRANK DUANE MOWER.	Newberry, S. C.	1114 *McCulloh St.*
Newberry College. *Group III.*		
MCHARDY MOWER.	Newberry, S. C.	1114 *McCulloh St.*
Private Instruction. *Preliminary Year.*		
EDWARD RICHARDS NOBLE.	Johnstown, Pa.	1709 *Madison Av.*
St. Stephen's College, N. Y. *Group I.*		
HARRY B. RAFFEL.	Baltimore.	805 *W. Fayette St.*
Private Instruction. *Group VI.*		
EDWARD DUER REEVES.	Baltimore.	204 *W. Franklin St.*
Mr. Marston's School. *Preliminary Year.*		
JOHN ADELBERT RIGGINS.	Penngrove, N. J.	1319 *Linden Av.*
Temple College (Phila.). *Group III.*		
JACOB ARNER SAYLER, JR.	Baltimore.	1516 *Eutaw Place.*
Mr. Marston's School. *Group VI.*		
LLOYD PARKER SHIPPEN.	Baltimore.	209 *W. Monument St.*
Mr. Marston's School. *Group III.*		
WILLIAM PAYNE SHRIVER.	Baltimore.	1013 *Whitelock St.*
Dr. Deichmann's School. *Group VI.*		
ROBERT TYNES SMITH, JR.	Baltimore.	200 *W. Twenty-first St.*
Mr. Marston's School. *Group II.*		
WILSON LEVERING SMITH.	Baltimore.	1011 *St. Paul St.*
Mr. Marston's School. *Group II.*		
JULIAN SAMUEL STEIN.	Baltimore.	2245 *Eutaw Place.*
The Hotchkiss School (Conn.). *Group II.*		
CUSTIS GIBSON STEPHENS.	St. Louis, Mo.	504 *N. Carrollton Av.*
Smith Academy (St. Louis). *Group VI.*		
JOSEPH LAFAYETTE STEPHENS.	St. Louis, Mo.	504 *N. Carrollton Av.*
Smith Academy (St. Louis). *Preliminary Year.*		
ELLIOT STROUSE.	Baltimore.	1724 *Eutaw Place.*
Private Instruction. *Preliminary Year.*		
CHARLES AUGUSTUS VOGELER.	Baltimore.	*The Severn.*
Mr. C. Maupin, Instructor. *Group III.*		
HENRY MICHAEL WARNER.	Baltimore.	1303 *Madison Av.*
Private Instruction. *Group II.*		
AUGUSTUS PRICE WEST.	Baltimore.	2438 *Maryland Av.*
Private Instruction. *Group IV.*		
HORACE SLINGLUFF WHITMAN.	Baltimore.	*Walbrook.*
Baltimore City College. *Group VI.*		
MARCUS WILTON WOLF, JR.	Baltimore.	210 *Mosher St.*
Baltimore City College. *Group II.*		
ARTHUR WRIGHT.	Baltimore County.	*Delight P. O.*
Mr. C. Maupin, Instructor. *Group III.*		

Special Students.

Reinier Koller Beeuwkes. Baltimore. 2005 *Druid Hill Av.*
Baltimore City College, 1896. *Electricity.*

George Cator. Baltimore. 803 *St. Paul St.*
Physics.

William Trout Everett. Baltimore. 1022 *N. Eutaw St.*
Mr. C. Maupin, Instructor. *Electricity.*

Clinton Root Foutz. Baltimore. 1416 *Harlem Av.*
University Preparatory School (Ithaca). *Mathematics and Physics.*

John Sharshall Grasty. Baltimore. *Roland Park.*
Staunton (Va.) Academy. *Group VI.*

Louis Illmer, Jr. Baltimore. 1617 *Bolton St.*
Columbian University. *Electricity.*

Ralph James. Catonsville. *Catonsville.*
St. Paul's School (Long Island). *Mathematics and Physics.*

Peter Jenness. Baltimore. 26 *W. Biddle St.*
St. Paul's School (N. H.). *Electricity.*

John Wheelington Jones. Crisfield. *Crisfield.*
Dickinson College. *English and Philosophy.*

Clarke John Morrison. Washington, D. C. 917 *McCulloh St.*
Washington High School. *Mathematics and Physics.*

Craig Elder Nightingale. New York City. 917 *McCulloh St.*
Princeton University. *Electricity.*

James Oscar Preston. Baltimore. 2210 *Eutaw Place.*
Baltimore City College. *Mathematics and Physics.*

Israel Euclid Rabinovitch. Baltimore. 1005 *E. Baltimore St.*
University of Pennsylvania. *Mathematics.*

John Maurice Rehberger. Baltimore. 1709 *Aliceanna St.*
Baltimore Polytechnic Institute. *Chemistry.*

Edwin Martin Spencer. St. Joseph, Mo. 1305 *Maryland Av.*
Virginia Military Institute. *Group VI.*

James Carlyle Stephens. Norfolk, Va. 1763 *E. North Av.*
Norfolk Academy. *Electricity.*

James William Swaine. Baltimore. 1918 *Mt. Royal Av.*
Baltimore City College, 1896. *Electricity.*

Charles Barnitz Wirt. Hanover, Pa. 849 *N. Eutaw St.*
Hanover High School. *Mathematics and Physics.*

Henry Clay Wright, Jr. Baltimore County. *Delight P. O.*
Mr. C. Maupin, Instructor. *Mathematics and Physics.*

Frederick Zies. Baltimore. 320 *S. Fremont St.*
Baltimore City College, 1898. *Mathematics and Physics.*

(20)

Attendants on Single Courses.

History and Economics.

Andrew Hooton Blackiston. Brown University.	Washington, D. C.	10 *E. Madison St.*
Charles Ingram. Boys' Latin School.	Baltimore County.	*Pikesville.*
William Radcliff. Western Maryland College.	Baltimore.	1722 *Bolton St.*
Albert W. Rayner.	Baltimore.	1814 *Eutaw Place.*

(4)

GOVERNMENT OF THE JOHNS HOPKINS UNIVERSITY.

TRUSTEES.

The Trustees are the ultimate source of authority in all matters pertaining to the University. They act collectively, through the standing committees named on page 2, and through the President of the University, who is *ex officio* a member of the Board.

PRESIDENT.

Daniel C. Gilman.

The duties of this office were thus defined by the Trustees, September 14, 1876:

The President of the University is the authorized means of communication between the Board and the various officers of instruction and administration employed in the University; it shall be his duty to consult with the Professors in respect to the development of their various departments, and the general interests of the University; to determine the appropriate duties of the Associates and Fellows; and to exercise such superintendence over the buildings, apparatus, books, and other property as will insure their protection and appropriate use. In respect to these matters and all others which concern the welfare of the University, he shall consult frequently with the Executive Committee, and he shall attend the meetings of the Board of Trustees. Purchases, alterations, repairs, and other incidental expenses must not be ordered by any of the officers of the University without his previous assent, or the expressed authority of the Board.

ACADEMIC COUNCIL.

D. C. Gilman (*Pres.*),
B. L. Gildersleeve,
Ira Remsen (*Sec'y*),
H. A. Rowland,
Paul Haupt,
W. H. Welch,
Simon Newcomb,
E. H. Griffin,
H. B. Adams.

By authority of the Trustees, the Academic Council (now consisting of the President and eight Professors) has met since the organization of the University to guide the various departments of study, to select the Fellows, and to act upon such other matters as may be brought before them.

BOARD OF UNIVERSITY STUDIES.

D. C. Gilman (*Pres.*),
B. L. Gildersleeve,
Ira Remsen,
H. A. Rowland,
Paul Haupt,
W. H. Welch,
Simon Newcomb,
E. H. Griffin,
H. B. Adams,
W. K. Brooks,
Maurice Bloomfield,
Thomas Craig,
A. M. Elliott,
H. N. Morse,
Minton Warren,
Henry Wood,
W. H. Howell,
J. W. Bright,
W. Hand Browne,
W. B. Clark,
J. S. Ames,
E. H. Spieker,
Louis Duncan,
E. A. Andrews,
K. F. Smith,
Adolf Rambeau,
C. L. Poor,
Sidney Sherwood,
J. M. Vincent,
H. F. Reid,
C. W. E. Miller,
B. J. Vos.

By request of the Academic Council (October 8, 1883), this Board, consisting of the President, twenty Professors, and eleven Associate Professors, has charge of the arrangements for the instruction of graduate students, and of the examinations for the degree of Doctor of Philosophy.

ADVISORY BOARD OF THE MEDICAL SCHOOL.

D. C. Gilman (*Pres.*),	H. M. Hurd,	J. J. Abel,
Ira Remsen,	H. A. Kelly,	W. H. Howell,
W. H. Welch,	W. K. Brooks,	F. P. Mall.
William Osler (*Dean*),	W. S. Halsted,	

This Board was constituted by resolution of the Trustees (April 3, 1893) "to report to the Trustees from time to time their suggestions, and to prepare and carry forward the proper arrangements for the instruction and graduation of medical students."

BOARD OF COLLEGIATE ADVISERS.

D. C. Gilman (*Pres.*),	Edward Renouf,	Adolf Rambeau,
Ira Remsen,	W. Hand Browne,	Sidney Sherwood,
E. H. Griffin (*Dean*),	H. E. Greene,	J. M. Vincent,
H. B. Adams,	J. S. Ames,	L. S. Hulburt,
A. M. Elliott,	E. H. Spieker (*Sec'y*),	B. J. Vos,
H. N. Morse,	Louis Duncan,	G. P. Dreyer,
Minton Warren,	E. A. Andrews,	J. E. Gilpin,
Henry Wood,	K. F. Smith,	E. B. Matthews.

By request of the Academic Council (May 13, 1882), the Board of Collegiate Advisers, consisting of the President and of representatives from each of the chief departments of undergraduate study, confers upon the progress made by the undergraduates and special students, and conducts the examinations for matriculation and for the baccalaureate degree, under the direction of the Academic Council. The other teachers of undergraduates may be called in from time to time to consult.

By resolution of this Board (June 15, 1888), a Standing Committee was appointed to act on all routine matters. The Committee now consists of E. H. Griffin, E. Renouf, E. H. Spieker, and S. Sherwood.

COMMITTEE ON THE LIBRARY.

D. C. Gilman (*Pres.*),	Ira Remsen,	N. Murray (*Sec'y*).
B. L. Gildersleeve,	W. Hand Browne,	

COMMITTEE ON THE GYMNASIUM.

D. C. Gilman (*Pres.*),	E. Renouf,	J. B. Crenshaw.
James L. McLane,	H. F. Reid,	

ADVISORY BOARD OF THE YOUNG MEN'S CHRISTIAN ASSOCIATION.

D. C. Gilman (*Pres.*),	E. H. Griffin (*Sec'y*),	B. C. Steiner.

TABULAR STATEMENTS.

1. Professors and Instructors, 1898–99.

President and Professors,	30
Clinical Professors,	7
Associate Professors,	17
Associates,	25
Instructors and Assistants,	33
Lecturers,	16
	128

The enumeration includes 46 professors and other instructors whose work lies wholly in the Medical School.

2. Students Enrolled, 1898–99.

Fellows by Courtesy,	21
Fellows,	20
Other Graduates,	169
Candidates for the Degree of M. D.,	197
Physicians attending Special Courses,*	55
Undergraduates,	163
Special Students,	24
Total,	**649**

* Including those entering in 1898 after the issue of the last Register.

3. Enumeration of Degrees of Students.

The above enumeration of students includes—

Doctors of Philosophy,	21	Bachelors of Science,	84
Doctors of Medicine,	54	Bachelors of Philosophy,	29
Masters of Arts,	53	Other Graduates,	16
Masters of Science,	12	Clergymen,	15
Bachelors of Arts,	281		

4. Attendance upon the Various Courses of Instruction, 1898–99.

Mathematics and Astronomy,	79	Semitic Languages,	31
Physics,	94	German,	125
Chemistry,	118	Romance Languages,	87
Geology and Mineralogy,	34	English and Anglo-Saxon,	142
Biology,	178	History and Political Science,	123
Greek,	47	Philosophy,	61
Latin,	71	Drawing,	75
Sanskrit and Comp. Philology,	33	Forensics and Elocution,	168

5. Classification by Residences of Students, 1898–99.

Maryland (Baltimore, 228),	277	Louisiana,	4
Virginia,	37	Michigan,	3
New York,	32	Texas,	3
Pennsylvania,	24	Mississippi,	2
Ohio,	22	Montana,	2
California,	19	Oregon,	2
Illinois,	19	Rhode Island,	2
Massachusetts,	19	Tennessee,	2
North Carolina,	18	Arkansas,	1
Connecticut,	15	Nebraska,	1
District of Columbia,	13	North Dakota,	1
Kentucky,	12	South Dakota,	1
Wisconsin,	12	Utah,	1
Minnesota,	10	Vermont,	1
Georgia,	9	Washington,	1
New Jersey,	9		
South Carolina,	9	Canada,	11
Missouri,	8	Hawaiian Islands,	2
Indiana,	6	India,	2
Iowa,	6	Austria,	1
Maine,	6	England,	1
West Virginia,	6	Italy,	1
Alabama.	5	Japan,	1
Colorado,	5	Scotland,	1
Kansas,	4		

6. INSTITUTIONS IN WHICH THE STUDENTS (1898–99) WERE GRADUATED.

Johns Hopkins University,	87
Yale University,	34
Harvard University,	16
Randolph-Macon College,	14
Princeton University,	12
Wellesley College,	11
Leland Stanford Jr. University,	10
Virginia, University of,	10
California, University of,	9
Maryland, University of,	9
Wisconsin, University of,	8
Amherst College,	7
Phys. and Surg., Coll. of (Balt.),	7
Smith College,	7
Cornell University,	6
Williams College,	6
Cincinnati, University of,	5
Columbia, University of,	5
Michigan, University of,	5
Chicago, University of,	4
Davidson College,	4
Georgia, University of,	4
Hampden-Sidney College,	4
Minnesota, University of,	4
Ohio Wesleyan University,	4
Toronto, University of,	4
St. John's College,	4
Dickinson College,	3
Iowa State University,	3
Knox College,	3
Maryland Agricultural College,	3
Oberlin College,	3
Pennsylvania College,	3
Rochester, University of,	3
South Carolina College,	3
Union College,	3
Adelbert College,	2
Bowdoin College,	2
Brooklyn Polytechnic Institute,	2
Brown University,	2
Central University (Ky.),	2
Cornell College (Iowa),	2
Georgetown University,	2
Hebrew Union College,	2
Indiana University,	2
Jefferson Medical College,	2
Leipzig, University of,	2
Luther College,	2
Northwestern University,	2
Ottawa University (Kan.),	2
Pulte Medical College (Ohio),	2
Queen's University,	2
Richmond College,	2
Roanoke College,	2
Rutgers College,	2
Southwestern Presbyterian Univ.,	2
Trinity College (N. C.),	2
Tulane University,	2
Vermont, University of,	2
Virginia Military Institute,	2
Virginia Theological Seminary,	2
Wabash College,	2
Washington University,	2
Washington and Jefferson Coll.,	2
Washington and Lee University,	2
Wesleyan University (Conn.),	2
Wisconsin, University of,	2
Wittenberg College,	2
Woman's Medical College (Balt.),	2
Woman's Medical Coll. (Phila.),	2
Alabama Polytechnic Institute,	1
Alabama, University of,	1
Albion College,	1
Atlanta Medical College,	1
Baldwin University,	1
Baltimore Medical College,	1
Beloit College,	1
Boston University,	1
Bryn Mawr College,	1
Buffalo, University of,	1
Calvin College,	1
Case School of Applied Science,	1
Charleston College,	1
Columbian University,	1

William Edwards Henderson, Ph. D., Professor of Chemistry, Ohio Univ.
Charles Hoeing, Ph. D., Instructor in Latin, Univ. of Rochester.—[1896-98].
Duncan Starr Johnson, Ph. D., Assistant in Botany.
Paul Henry Land, A. B., Fellow by Courtesy.
Omera Floyd Long, Ph. D., Instructor in Latin, Northwestern Univ.
William Tyler Mather, Ph. D., Associate Professor of Physics, Univ. of Texas.
Jens Anderson Ness, A. B., Fellow by Courtesy.—[1896-98].
Alexander Pell, Ph. D., Professor of Mathematics, Univ. of South Dakota.
Cornelius William Prettyman, A. B., Assistant in German, Univ. of Pa.
Charles Dabney Ragland, Ph. D., Professor of Chemistry, Randolph Macon Coll.
Frank Roy Rutter, Ph. D., U. S. Geological Survey, Washington.
George Burbank Shattuck, Ph. D., Instructor in Physiographic Geology.

1897.

Cleveland Abbe, Jr., Ph. D., Professor of Geology, Western Maryland Coll.
Charles Hillman Brough, Ph. D., Professor of Economics and History, Mississippi Coll.
Pierce Butler, A. B., now Fellow.—[1897-99].
Killis Campbell, Ph. D., Professor of English, Culver Military Acad., Ind.
Gilman Arthur Drew, Ph. D., Assistant in Zoölogy.
Charles Wilson Greene, Ph. D., Assistant Professor of Physiology, Stanford Univ.
Karl Joseph Grimm, now Fellow.—[1897-99].
James Graham Hardy, Ph. D., Instructor in Mathematics, Williams Coll.
William App Jones, Ph. D., Analytical Chemist, New York City.
William Kurrelmeyer, A. B., now Fellow.—[1897-99].
Guy Carleton Lee, Ph. D., Instructor in Elocution and History.
Charles Elwood Mendenhall, Ph. D., Instructor in Physics, Williams Coll.
Samuel Alfred Mitchell, Ph. D., Research Fellow, Yerkes Observatory, Univ. of Chicago.
Joseph Longworth Nichols, M. D.
William Albert Nitze, A. B., Fellow by Courtesy.
Daniel Allen Penick, Ph. D., Classical Instructor, Hackettstown, N. J.
Ebenezer Emmet Reid, Ph. D , Professor of Chemistry and Physics, Charleston Coll.
William Berney Saffold, Ph. D., Professor of Latin, Univ. of Alabama. *Did not enter on the fellowship.*
Henry Nevill Sanders, A. B., Fellow by Courtesy; Lecturer in Greek, McGill Univ.
Charles William Waidner, Ph. D., Assistant in Physics.

The list of the present holders of Fellowships is given on page 13.
The whole number of Fellows appointed in twenty-three years is 381.

7. Fellows.

Bruce Memorial Fellows in Biology.

This Fellowship was instituted by Mrs. Bruce, of New York, to commemorate the name of her son, Adam T. Bruce, Jr., Ph. D., Fellow in Biology, 1883–84, and Instructor in Osteology and Mammalian Anatomy, 1886–87. Preference is given to those who have held an ordinary Fellowship in Biology.

(When the institution is not named, this university is to be understood. *—Deceased.)

1888. Henry Van Peters Wilson, Ph. D. (1888), Professor of Biology, University of North Carolina.

1889. Shozaburo Watase, Ph. D. (1890), Assistant Professor of Cellular Biology, University of Chicago.

1890. Thomas Hunt Morgan, Ph. D. (1890), Professor of Biology, Bryn Mawr College. *Reappointed* 1891, *but resigned.*

1891, 1892. Robert Payne Bigelow, Ph. D. (1892), Instructor in Biology and Librarian, Massachusetts Institute of Technology; Editor-in-Chief, *American Naturalist.*

1893. Maynard Mayo Metcalf, Ph. D. (1893), Professor of Biology, Woman's College of Baltimore.

1894. Ross Granville Harrison, Ph. D. (1894), Associate in Anatomy. *Did not enter on the fellowship.*

1894. Seitaro Goto, S. D., Professor of Biology, First High School, Tokyo, Japan.

1895. Henry McElderry Knower, Ph. D. (1896), Instructor in Biology, Williams College, 1896–97; Fellow by Courtesy.

1895, 1896. George Lefevre, Ph. D. (1896), Science Master, Boys' High School, Atlanta, Ga.

1897. *Franklin Story Conant, Ph. D. (1897). *Did not enter on the fellowship.*

1897. Duncan Starr Johnson, Ph. D. (1897), Assistant in Botany.

1898. Gilman Arthur Drew, Ph. D. (1898), Assistant in Zoölogy. *Did not enter on the fellowship.*

Fellows.

(Arranged under the date of first appointment. When the institution is not named, this university is to be understood. Figures in brackets indicate the tenure of the fellowship, when it was held more than one year. *—Deceased.)

1876.

Henry Carter Adams, Ph. D., Professor of Political Economy and Finance, Univ. of Michigan; Statistician, Interstate Commerce Commission.—[1876–79].

Herbert Baxter Adams, Ph. D., LL. D., Professor of American and Institutional History.—[1876–78].

William Keith Brooks, Ph. D., LL. D., Professor of Zoölogy; Director of the Chesapeake Zoölogical Laboratory. *Did not enter on the fellowship.*

Samuel Fessenden Clarke, Ph.D., Professor of Natural History, Williams Coll.—[1876–79].

Thomas Craig, Ph. D., Professor of Pure Mathematics.—[1876–79].

Joshua Walker Gore, C. E., Professor of Natural Philosophy and Engineering, Univ. of North Carolina.—[1876–78].

George Bruce Halsted, Ph. D., Professor of Mathematics, Univ. of Texas.—[1876–78].

Edward Hart, Ph. D., Professor of Analytical Chemistry, Lafayette Coll.—[1876–78].

Daniel Webster Hering, C. E., Professor of Physics, New York Univ.—[1876–78].

Malvern Wells Iles, Ph. D., Chemist, Denver, Colorado.—[1876–78].

William White Jacques, Ph. D., Lecturer on Telegraph Engineering, Mass. Inst. of Tech., 1885–91; Electrical Engineer, Boston, Mass.—[1876–79].

Charles Rockwell Lanman, Ph. D., Professor of Sanskrit, Harvard Univ.; Turnbull Lecturer, 1897–98.

David McGregor Means, A. B., Professor of Political and Mental Science, Middlebury Coll., 1877–80; Attorney at Law, New York City.

Harmon Northrup Morse, Ph. D., Professor of Analytical Chemistry. *Did not enter on the fellowship.*

Walter Hines Page, Professor in Louisville (Ky.) Male High School, 1878–79; Editor of *The Atlantic Monthly*, Boston.—[1876–78].

* Peter Porter Poinier, M. E. *Did not enter on the fellowship.*

Erasmus Darwin Preston, C. E., U. S. Coast and Geodetic Survey, Washington.—[1876–78].

*Henry Joseph Rice, Sc. D., Professor of Natural Sciences, Brooklyn (N. Y.) High School, 1882–85.—[1876–78].

Josiah Royce, Ph. D., Professor of the History of Philosophy, Harvard.—[1876–78].

Alexander Duncan Savage, B. Litt., Farmington, Conn.—[1876–79].

Ernest Gottlieb Sihler, Ph. D., Professor of Latin, New York Univ.—[1876–79].

Frederick Boyd Van Vorst, A. B., Attorney at Law, New York City.

*John Henry Wheeler, Ph. D., Professor of Greek, Univ. of Virginia, 1882–87.

1877.

Francis Greenleaf Allinson, Ph. D., Associate Professor of Greek Literature and History, Brown Univ.—[1877–80].

Fabian Franklin, Ph. D., Assistant, Associate, Associate Professor, and Professor of Mathematics, 1879–95; Editor of *The Baltimore News*.—[1877–79.]

Lyman Beecher Hall, Ph. D., Professor of Chemistry, Haverford Coll.—[1877–79].

Allan Marquand, Ph. D., L. H. D., Professor of Archæology and the History of Art, Princeton.—[1877–80].

1878.

Maurice Bloomfield, Ph. D., LL. D., Professor of Sanskrit and Comparative Philology.

Constantine Fahlberg, Ph. D., Chemist, Salbke-Westerhüsen, Germany.—[1878–80].

Edwin Herbert Hall, Ph. D., Professor of Physics, Harvard Univ.—[1878–80].

Edward Coles Harding, A. M., Professor of Greek, Univ. of Louisiana, 1879–80; Editor of *The Baltimore American*.

Rev. Charles Robert Hemphill, D. D., Professor of New Testament Exegesis, Louisville Presbyterian Theol. Sem.; Clergyman, Louisville, Ky.

Isaac Ott, M. D., Professor of Physiology, Medico-Chirurgical Coll. of Philadelphia.

Henry Sewall, Ph. D., M. D., Professor of Physiology, Univ. of Denver.

Christian Sihler, Ph. D., M. D., Instructor and Acting Professor of Histology, etc., Western Reserve Univ., 1889–94; Physician, Cleveland, Ohio.—[1877–79].

Washington Irving Stringham, Ph. D., Professor of Mathematics, Univ. of California.—[1878–80].

Charles Ambrose Van Velzer, S. B., Professor of Mathematics, Univ. of Wisconsin.—[1878–81].

Abram Van Epps Young, Ph. B., Professor of Chemistry, Northwestern Univ.—[1878–80].

1879.

Brown Ayres, S. B., Professor of Physics and Astronomy, Tulane Univ.

Louis Bevier, Ph. D., Professor of Greek, Rutgers Coll.—[1879–81].

William Burney, Ph. D., Professor of Chemistry, Univ. of South Carolina.

Edward Mussey Hartwell, Ph. D., M. D., LL. D., Director of Physical Training, Boston Public Schools, 1891–97; Secretary, Dept. of Municipal Statistics, Boston.—[1879–81].

*John Robin McDaniel Irby, Ph. D.

Mitsuru Kuhara, Ph. D., Director and Professor of Chemistry, First Middle School, Tokyo.—[1879–81].

*Oscar Howard Mitchell, Ph. D., Professor of Mathematics, Marietta Coll., 1882-89.—[1879-82].

Edward Leamington Nichols, Ph. D., Professor of Physics, Cornell Univ.

George Frederick Nicolassen, Ph. D., Professor of Greek and German, Southwestern Presbyterian Univ., Tenn.—[1879-81].

Waldo Selden Pratt, A. B., Mus. D., Professor of Ecclesiastical Music and Hymnology, Hartford (Conn.) Theol. Sem.

Robert Woodworth Prentiss, M. S., Professor of Mathematics and Astronomy, Rutgers Coll.—[1879-81].

William Thompson Sedgwick, Ph. D., Professor of Biology, Mass. Inst. of Tech.; Biologist, Mass. Board of Health; Curator, Lowell Inst., Boston.

*Herman Voorhees, C. E. *Did not enter on the fellowship.*

Charles Otis Whitman, Ph. D., LL. D., Professor of Zoölogy, Univ. of Chicago. *Did not enter on the fellowship.*

Edmund Beecher Wilson, Ph. D., Professor of Zoölogy, Columbia Univ.—[1879-81].

1880.

James Wilson Bright, Ph. D., Professor of English Philology.—[1880-82].

Benjamin Chapman Burt, A. B., Acting Professor of Philosophy and Pedagogy, Univ. of Colorado, 1894-95.

Robert Dorsey Coale, Ph. D., Professor of Chemistry and Toxicology, Univ. of Md.

Lawrence Bunting Fletcher, Ph. D., Instructor in Physics, Wesleyan Univ., 1882-83; Marlboro, N. Y.

*Spencer Hedden Freeman, A. B., Professor of Physics and Astronomy, Adelbert Coll., 1882-86.—[1880-82].

Kakichi Mitsukuri, Ph. D., Professor of Zoölogy, Univ. of Toyko, Japan.

Bernard Francis O'Connor, Ph. D., Instructor and Adjunct Professor of Romance Languages, Columbia Univ., 1883-91; New York City.—[1880-82].

Chase Palmer, Ph. D., Professor of Chemistry, Manual Training High School, Louisville, Ky.—[1880-82].

Herbert Mills Perry, A. B., late Instructor, Cascadilla School, Ithaca.—[1880-82].

William Lee Rowland, S. B., Chemist, Philadelphia. *Did not enter on the fellowship.*

Andreas Franz Wilhelm Schimper, Ph. D., Professor of Botany, Univ. of Bonn.

Edward Henry Spieker, Ph. D., Associate Professor of Greek and Latin.—[1880-82].

Morrison Isaac Swift, Ph. D., Instructor in Philosophy, Hobart Coll., 1882-84.—[1880-82].

*Arthur Wilson Wheeler, A. B.

1881.

William John Alexander, Ph. D., Professor of English, Univ. of Toronto.—[1881-83.]

Edward Sanford Burgess, A. B., Professor of Natural Science, Normal Coll., N. Y.

William James Comstock, Ph. D., Instructor in Organic Chemistry, Yale Univ.

William Cathcart Day, Ph. D., Professor of Chemistry and Physics, Swarthmore Coll.—[1881-83].

Henry Herbert Donaldson, Ph. D., Professor of Comparative Neurology, Univ. of Chicago.—[1881-83].

William Pitt Durfee, Ph. D., Professor of Mathematics and Dean of the Faculty, Hobart Coll.—[1881-83].

George Stetson Ely, Ph. D., Examiner U. S. Patent Office.—[1881-83].

Benjamin Ives Gilman, A. B., Curator, Museum of Fine Arts, Boston, Mass.

John Franklin Jameson, Ph. D., LL. D., Professor of History, Brown Univ.

Charles Herschel Koyl, A. B., Instructor in Physics, Swarthmore Coll, 1887-88; New York City.—[1881-83].

Henry Leslie Osborn, Ph. D., Professor of Biology and Geology, Hamline Univ.

Henry Newlin Stokes, Ph. D., Assistant Professor of Chemistry, Univ. of Chicago, 1892-94; U. S. Geological Survey, Washington.—[1881-83].

Benjamin Willis Wells, Ph. D., Professor of Modern Languages, Univ. of the South. *Did not enter on the fellowship.*

1882.

Charles John Bell, A. B., Professor of Chemistry, Univ. of Minnesota. *Did not enter on the fellowship.*

James McKean Cattell, Ph. D., Professor of Psychology, Columbia; Editor of *Science.*

Ellery William Davis, Ph. D., Professor of Mathematics, Univ. of Nebraska.—[1882-84].

David Talbot Day, Ph. D., U. S. Geological Survey, Washington, D. C.—[1882-84].

Alfred Emerson, Ph. D., Associate Professor of Classical Archæology, Cornell Univ.—[1882-84].

William Scott Fleming, A. B., Professor of Greek and German, Davidson Coll., 1883-85; Wetumpka, Ala.

Arthur Lincoln Frothingham, Jr., Ph. D., Professor of Archæology and the History of Art, Princeton.—[1882-85].

Henry Root Goodnow, A. B., New York City.

Elgin Ralston Lovell Gould, Ph. D., President, City and Suburban Homes Co., New York.—[1882-84].

Arthur Stafford Hathaway, S. B., Professor of Mathematics, Rose Polytech. Inst.—[1882-84].

William Henry Howell, Ph. D., M. D., Professor of Physiology.—[1882-84].

Edward Harrison Keiser, Ph. D., Professor of Chemistry, Bryn Mawr.—[1882-84].

Arthur Lalanne Kimball, Ph. D., Professor of Physics, Amherst Coll.

Harry Fielding Reid, Ph. D., Associate Professor of Geological Physics. *Did not enter on the fellowship.*

1883.

William Muss Arnolt, Ph. D., Instructor and Assistant Recorder, Univ. of Chicago.—[1883-85].

Gustav Bissing, Ph. D., Examiner, U. S. Patent Office, 1884-97; Patent Attorney, Washington.

*Adam Todd Bruce, Ph. D., Instructor in Osteology, etc., 1886-87.

Archibald Lamont Daniels, D. Sc., Williams Professor of Mathematics and Physics, Univ. of Vermont.

John Dewey, Ph. D., Professor of Philosophy, Univ. of Chicago.

*James Reynolds Duggan, Ph. D., Professor of Chemistry, Wake Forest, 1886-88.

Hans Carl Günther von Jagemann, Ph. D., Assistant Professor of German, Harvard.

*Gustav Adolph Liebig, Jr., Ph. D., Assistant in Electricity, 1887-90.—[1883-85].

Charles William Emil Miller, Ph. D., Associate Professor of Greek.—[1883-85].

Charles Albert Perkins, Ph. D., Professor of Physics, etc., Univ. of Tennessee.

*Lewis Tebbetts Stevens, M. D., late Lecturer, Washington Univ.

Lewis Webb Wilhelm, Ph. D., Mathematical Instructor, Baltimore.

1884.

Ethan Allen Andrews, Ph. D., Associate Professor of Biology.—[1884-86].

Henry Crew, Ph. D., Professor of Physics, Northwestern Univ.—[1884-86].

Homer Winthrop Hillyer, Ph. D., Assistant Professor of Organic Chemistry, Univ. of Wisconsin.

Rev. Abel Henry Huizinga, Ph. D., Adjunct Professor, McCormick Theol. Sem., 1894-96; Clergyman, Fishkill, N. Y.—[1884-86].

Frederick Schiller Lee, Ph. D., Adjunct Professor of Physiology, Columbia Univ.

Charles Herbert Levermore, Ph. D., President of Adelphi College, Brooklyn.

Henry Francis Nachtrieb, S. B., Professor of Biology, Univ. of Minnesota.

Henry Barber Nixon, Ph. D., Professor of Mathematics, Pennsylvania Coll.

William Noyes, Jr., M. D., Superintendent, Boston Insane Hospital, Mattapan, Mass.

Albert Gallatin Palmer, Ph. D., Assistant Professor of Chemistry, Swarthmore Coll., 1886-87; Norwood, Md.

Ernest Mondell Pease, A. B., Professor of Latin, Leland Stanford Jr. Univ.—[1884-86].

Albert Harris Tolman, Ph. D., Assistant Professor of English Literature, Univ. of Chicago. *Did not enter on the fellowship.*

Woodrow Wilson, Ph. D., LL. D., Lecturer on Constitutional Law, New York Law School; Lecturer, 1887–98; Professor of Jurisprudence, etc., Princeton.

1885.

Cyrus Adler, Ph. D., Librarian of the Smithsonian Institution; Professor of Oriental History and Archæology, Columbian Univ.—[1885–87].

*David Barcroft, Ph. D.

William Shirley Bayley, Ph. D., U. S. Geological Survey; Professor of Geology and Mineralogy, Colby Univ.—[March, 1885–June, 1886].

Louis Bell, Ph. D., Professor of Physics, etc., Purdue Univ., 1888–90; Chief Engineer, General Electric Company, Chicago, Ill.—[1885–87].

William Henry Burnham, Ph. D., Instructor in Pedagogy, Clark Univ.

Francis Albert Christie, A. B., Professor of Church History, Theol. School, Meadville, Pa.—[1885–87].

Davis Rich Dewey, Ph. D., Professor of Economics and Statistics, Mass. Inst. of Tech.

Albert E. Egge, Ph. D., Professor of English, Washington Agric. Coll.

William Henry Emerson, Ph. D., Professor of Chemistry, Georgia School of Tech.

John Charles Fields, Ph. D., Professor of Mathematics, Allegheny Coll.

Joseph Jastrow, Ph. D., Professor of Experimental Psychology, Univ. of Wisconsin.

George Theophilus Kemp, Ph. D., M. D., Professor of Physiology, Univ. of Illinois.

Marion Dexter Learned, Ph. D., Professor of German, Univ. of Pennsylvania.

Gonzalez Lodge, Ph. D., Professor of Latin, Bryn Mawr College.

Arthur McDonald, A. B., Bureau of Education, Washington, D. C. *Did not enter on the fellowship.*

Charles Skeele Palmer, Ph. D., Professor of Chemistry, Univ. of Colorado.

George Thomas White Patrick, Ph. D., Professor of Philosophy, Iowa State Univ. *Reappointed* 1897, *but resigned.*

Moses Stephen Slaughter, Ph. D., Professor of Latin, Univ. of Wisconsin.

Charles Whetham, A. B., President of Whetham Coll., Vancouver, B. C., 1890–93; Toronto, Ont.

Charles Baker Wright, A. B., Professor of English Literature and Rhetoric, Middlebury Coll. *Did not enter on the fellowship.*

1886.

Edgar Pierce Allen, A. B., Attorney at Law, New York City.—[1886–88].

John Pendleton Campbell, Ph. D., Professor of Biology, Univ. of Georgia.

Henry Clark, A. B., Classical Instructor, London, England.

Herbert Charles Elmer, Ph. D., Assistant Professor of Latin, Cornell Univ.

Henry Brayton Gardner, Ph. D., Associate Professor of Political Economy, Brown Univ.

*Milton Haight, A. B., Professor of English and Mathematics, Sapporo Agric. Coll., Japan, 1887–92; Instructor, Collegiate Inst., Strathroy, Canada, 1893–96.

John Leslie Hall, Ph. D., Professor of English and History, William and Mary Coll.

Charles Willard Hayes, Ph. D., U. S. Geological Survey, Washington.

George Benjamin Hussey, Ph. D., Docent, Univ. of Chicago.

James Hervey Hyslop, Ph. D., Professor of Logic and Ethics, Columbia Univ.

Andrew Cowper Lawson, Ph. D., Associate Professor of Geology and Mineralogy, Univ. of California.

Franklin Paine Mall, M. D., Professor of Anatomy.—[1886–88].

Yujiro Motora, Ph. D., Professor of Psychology, etc., Univ. of Tokyo, Japan.

Julius Nelson, Ph. D., Professor of Biology, Rutgers Coll.

William Ridgely Orndorff, Ph. D., Asst. Professor of Organic Chemistry, Cornell Univ.

Daniel Richard Randall, Ph. D., Attorney at Law, Annapolis, Md.

Henry Dallas Thompson, D. Sc., Ph. D., Professor of Mathematics, Princeton.

Edward Burr Van Vleck, Ph. D., Associate Professor of Mathematics, Wesleyan Univ.
Amos Griswold Warner, Ph. D., Professor of Economics, Leland Stanford Jr. Univ.
John Roaf Wightman, Ph. D., Professor of Romance Languages, Oberlin Coll.

1887.

Joseph Sweetman Ames, Ph. D., Professor of Physics.
Philip Wheelock Ayres, Ph. D., Secretary, Organized Charities, Chicago, Ill.
William Snyder Eichelberger, Ph. D., Instructor in Mathematics, etc., Wesleyan Univ., 1891–96; U. S. Nautical Almanac, Washington.
Henry Rushton Fairclough, Ph. D., Associate Professor of Greek and Latin, Leland Stanford Jr. Univ. *Did not enter on the fellowship.*
*William Curns Lawrence Gorton, Ph. D., Associate Professor and Professor of Mathematics and Astronomy, Woman's Coll., Baltimore, 1888–94.
William Herbert Hobbs, Ph. D., Assistant Professor of Mineralogy and Metallurgy, Univ. of Wisconsin.
Joseph Hoeing Kastle, Ph. D., Professor of Chemistry, Kentucky State Coll.
Felix Lengfeld, Ph. D., Assistant Professor of Inorganic Chemistry, Univ. of Chicago.
Archibald MacMechan, Ph. D., Professor of English, etc., Dalhousie Univ.
Herbert William Magoun, Ph. D., Professor of Latin, Redfield College, S. Dak.
*Thomas McCabe, Ph. D., Associate in Romance Languages, Bryn Mawr, 1890–91.
John Leverett Moore, Ph. D., Professor of Latin, Vassar Coll.
Augustus Taber Murray, Ph. D., Professor of Greek, Leland Stanford Jr. Univ.
Edmund Clark Sanford, Ph. D., Assistant Professor of Psychology, Clark Univ.
Charles Lee Smith, Ph. D., Professor of History, William Jewell Coll., Mo.
Arthur Clarence Wightman, Ph. D., Adjunct Professor of Biology and Physics, Randolph Macon Coll.
Henry Van Peters Wilson, Ph. D., Professor of Biology, Univ. of North Carolina.

1888.

Charles McLean Andrews, Ph. D., Associate Professor of History, Bryn Mawr.
Frank Wilson Blackmar, Ph. D., Professor of History and Sociology, Univ. of Kansas.
Charles Augustus Borst, A. B., Assistant in Astronomy, 1889–92.
William Merriam Burton, Ph. D., Superintendent, Standard Oil Co., Whiting, Ind.
Morgan Callaway, Jr., Ph. D., Associate Professor of English, Univ of Texas.
Charles Hiram Chapman, Ph. D., President of the Univ. of Oregon.
Edwin Whitfield Fay, Ph. D., Professor of Latin, Washington and Lee.—[1888–90].
Adam Capen Gill, Ph. D., Assistant Professor of Mineralogy, etc., Cornell Univ.
Joseph Edward Harry, Ph. D., Professor of Greek and German, Georgetown Coll., Ky.
James Taft Hatfield, Ph. D., Professor of German, Northwestern Univ.
George Allison Hench, Ph. D., Professor of German, Univ. of Michigan.
Clifton Fremont Hodge, Ph. D., Assistant Professor of Physiology, Clark Univ.
Cary Talcott Hutchinson, Ph. D., Consulting Engineer, N. Y.; Acting Associate Professor of Electricity.
Alvin Frank Linn, Ph. D., Professor of Chemistry and Mineralogy, Wittenberg Coll., O. *Did not enter on the fellowship.*
Thomas Logie, Ph. D., Associate Professor of Romance Lang., Rutgers Coll., 1893–98.
Alfred Edward Thayer, M. D., Physician, New York City.
*James Starr Trueman, A. B., Professor of Greek and Latin, Allegheny Coll., 1889–92.
Shozaburo Watase, Ph. D., Assistant Professor of Cellular Biology, Univ. of Chicago.

1889.

Edward Carey Applegarth, Ph. D., M. D., Physician, Baltimore.
Arthur George Blachstein, A. B., M. D., St. Petersburg, Russia.
Rudolf John Julius de Roode, Jr., Ph. D., Analytical Chemist, New York City.
George Peter Dreyer, Ph. D., Associate in Biology.

Hermann Louis Ebeling, Ph. D., Professor of Greek, Miami Univ.
Charles Jaques Goodwin, Ph. D., Acting Professor of Greek, St. Stephen's Coll., N. Y.
Christopher Johnston, Jr., Ph. D., Associate in Semitic Languages.—[1889-91].
Hiram Benjamin Loomis, Ph. D., Instructor in Physics, Academy of Northwestern Univ.
John Hanson Thomas McPherson, Ph. D., Professor of History, Univ. of Georgia.
Thomas Hunt Morgan, Ph. D., Professor of Biology, Bryn Mawr.
Daniel Alexander Murray, Ph. D., Instructor in Mathematics, Cornell Univ.
Charles Lane Poor, Ph. D., Associate Professor of Astronomy.
George Mann Richardson, Ph. D., Professor of Organic Chemistry, Stanford Univ.
John Cunningham Robertson, Ph. D., Professor of Greek, St. Stephen's Coll., N. Y.
Charles Hunter Ross, Ph.D., Adjunct Professor of Modern Lang., Alabama Polytech. Inst.
Joseph Samuel Shefloe, Ph. D., Professor of Romance Languages and Librarian, Woman's Coll., Baltimore.
Robert Benson Steele, Ph. D., Professor of Latin, Illinois Wesleyan Univ.
Bert John Vos, Ph. D., Associate Professor of German.—[1889-91].
James Albert Woodburn, Ph. D., Professor of American History, Indiana Univ.

1890.

William Wilson Baden, Ph. D., Professor of Greek, Central Univ., 1893-96; Fellow by Courtesy.—[1890-92].
Robert Payne Bigelow, Ph. D., Instructor in Biology and Librarian, Mass. Inst. of Tech.; Editor-in-Chief, *American Naturalist*.
Edwin Grant Conklin, Ph. D., Professor of Comparative Embryology, Univ. of Pa.
Rev. William Levering Devries, S. T. B., Ph. D., Clergyman, Washington, D. C.
George Houghton Gilman, A. B., LL. B., Attorney at Law, New York City. *Did not enter on the fellowship.*
Thomas Perrin Harrison, Ph. D., Professor of English, Davidson Coll.
Charles Rollin Keyes, Ph. D., late State Geologist of Missouri.
Edwin Seelye Lewis, Ph. D., Assistant Professor of Romance Languages, Princeton.
Arthur Stanley Mackenzie, Ph. D., Professor of Physics, Bryn Mawr.
Henry Parker Manning, Ph. D., Assistant Professor of Mathematics, Brown Univ.
Wilfred Pirt Mustard, Ph. D., Professor of Latin, Haverford Coll.
Barker Newhall, Ph. D., Professor of Greek, Kenyon Coll., O.
Edward Bennett Ross, Ph. D., Professor of Physics, Wesleyan Univ.
Charles Edward Saunders, Ph. D , Professor of Chemistry, Central Univ., Ky., 1891-93; Ottawa, Canada.
Bernard Christian Steiner, LL. B., Ph. D., Librarian, Enoch Pratt Free Library; Associate in History.
John White, Jr., Ph. D., Instructor in Chemistry, Univ. of Nebraska.
Westel Woodbury Willoughby, Ph. D., Associate in Political Science.

1891.

Edward Ambrose Bechtel. A. B., Instructor in Latin, Northwestern Univ., 1893-97; Fellow in Latin, Univ. of Chicago. *Did not enter on the fellowship.*
Julius Blume, Modern Lang. Master, University School, Baltimore.
Albert Bernhardt Faust, Ph. D., Associate Professor of German, Wesleyan Univ.
Simon Flexner, M. D., Professor of Pathological Anatomy; Resident Pathologist, Johns Hopkins Hospital.
Ulysses Sherman Grant, Ph. D., Assistant State Geologist, Minneapolis, Minn.
William Asbury Harris, Ph. D., Professor of Greek, Baylor Univ., Texas.
Harry Clary Jones, Ph. D., Associate in Physical Chemistry.
James Lawrence Kellogg, Ph. D., Professor of Biology, Olivet Coll.
Elmer Peter Kohler, Ph. D., Associate in Chemistry, Bryn Mawr.
*Paul Erasmus Lauer, Ph. D., Assistant Supt. of Schools, Cleveland, O., 1892-93.
David Judson Lingle, Ph. D., Instructor in Physiology, Univ. of Chicago.

John Hanson Thomas Main, Ph. D., Professor of Greek, Iowa Coll.
Frank Jewett Mather, Jr., Ph. D., Instructor in English, Williams Coll.
Michael Andrew Mikkelsen, Ph. D., Montclair, N. J.
John Dyneley Prince, Ph. D., Professor of Semitic Languages, etc., New York Univ.
Brantz Mayer Roszel, Ph. D., Instructor in Physics, Washington (D. C.) High School.
George Owen Squier, Ph. D., First Lieut., U. S. A.; Instructor, Artillery School, Fortress Monroe.
Sidney Grant Stacey, Ph. D., Instructor in Latin, Brooklyn (N. Y.) High School.
Joseph Moody Willard, A. B., Professor of Mathematics, Pennsylvania State Coll.

1892.

Burleigh Smart Annis, A. B., Instructor in Mathematics, Northwestern Univ.
Lewellys Franklin Barker, M. D., Associate Professor of Anatomy; Asst. Resident Pathologist, Johns Hopkins Hospital.
Melvin Brandow, A. B., Assistant Librarian.
Alexander Mitchell Carroll. Ph. D., Professor of Greek, Richmond Coll., 1895-97; Reader in Classical Archæology.
Harry Max Ferren, A. B., Instructor in German, Allegheny (Pa.) High School.
David Hull Holmes, Ph. D., Classical Instructor, N. Y.
Arthur John Hopkins, Ph. D., Assistant Professor of Chemistry, Amherst Coll.
Theodore Hough, Ph. D., Assistant Professor of Biology, Mass. Inst. of Tech.
James Alton James, Ph. D., Professor of History, Northwestern Univ.
Francis Plaisted King, Ph. D., Asst. Geologist of Georgia, 1893-96; Portland, Me.
Emory Bair Lease, Ph. D., Assistant Professor of Latin, Univ. of Michigan.
*Edward Payson Manning, Ph. D., Instructor, St. Lawrence Univ., 1894-95.
Louis Emil Menger, Ph. D., Associate Professor of Romance Philology, Bryn Mawr.
*Lucius Salisbury Merriam, Ph. D., Instructor in Political Economy, Cornell, 1893-94.
Mayo Maynard Metcalf, Ph. D., Professor of Biology, Woman's Coll., Baltimore.
René de Poyen-Bellisle, Ph. D., Instructor in Romance Philology, Univ. of Chicago.
Arthur Percy Saunders, Ph. D., Asst. in Chemistry, McGill Univ.
Rev. Daniel Gurden Stevens, Jr., Ph. D., Clergyman, Baltimore.—[1892-94].
Frederick Tupper, Jr., Ph. D., Professor of Rhetoric and English Lit., Univ. of Vermont.
Frank Alfred Wolff, Jr., Ph. D., Chemist, Department of Agriculture, Washington.

1893.

Thomas Stockham Baker, Ph. D., Associate in German.
John Spencer Bassett, Ph. D., Professor of History, Trinity Coll., N. C.
George Melville Bolling, Ph. D., Asst. Professor of Comparative Philol., Catholic Univ.
Abraham Cohen, Ph. D., Associate in Mathematics.
Ervin Sidney Ferry, S. B., New York City.
William Francis Gallaway, Ph. D., Classical Instructor, Savannah, Ga.
Ross Granville Harrison, Ph. D., Associate in Anatomy.
Bert Holmes Hite, M. S., Professor of Chemistry, West Va. Univ.—[1893-95].
Samuel Verplanck Hoffman, M. E., Morristown, N. J.
Jacob H. Hollander, Ph. D., Associate in Economics.
Charles William Leverett Johnson, Ph. D., Instructor in Greek, Yale Univ., 1897-99.
George Wesley Johnston, Ph. D., Lecturer in Latin, Univ. of Toronto.
George Charles Keidel, Ph. D., Associate in Romance Languages.—[1893-95].
Edward Bennett Mathews, Ph. D., Associate in Mineralogy.
Edwin Fitch Northrup, Ph. D., Associate Professor of Physics, Univ. of Texas, 1896-97; Westinghouse Co., Wilkensburg, Pa.—[1893-95].
Alfred William Stratton, Ph. D., Associate in Sanskrit, Univ. of Chicago.—[1893-95.]
Frederick Henry Sykes, Ph. D., University Extension Lecturer, and Editor of *The Citizen*, Philadelphia.
George Francis Weida, Ph. D., Professor of Pure Chemistry, Kansas Agric. Coll.

1894.

Arthur Fisher Bentley, Ph. D., Journalist, Chicago.
Samuel Walker Beyer, Ph. D., Associate Professor of Geology, Iowa Agric. Coll.
Clarence Griffin Child, Ph. D., Assistant Editor, Worcester's Dictionary; Instructor in English, Univ. of Pa.
Frank Hollinger Clutz, Ph. D., Instructor, Midland Coll., Kan.—[1894-96].
Fonger DeHaan, Ph. D., Associate in Spanish, Bryn Mawr. *Did not enter on the fellowship.*
Henry Stewart Gane, Ph. D., U. S. Geological Survey, Washington.
William August Haussmann, Ph. D., Instructor, Allegheny High School, Pa.
Reid Hunt, Ph. D., M. D., Associate in Pharmacology.—[1894-96].
Thomas Franklin Kane, Ph. D., Professor of Latin, Olivet Coll.
William Hamilton Kirk, Ph. D., Instructor in Latin, Vanderbilt Univ.
Henry McElderry Knower, Ph. D., Instructor in Biology, Williams Coll., 1896-97; Fellow by Courtesy.
George Lefevre, Ph. D., Science Master, Boys' High School, Atlanta, Ga.
Caspar Levias, A. B., Professor of Exegesis and Hebrew Grammar, Hebrew Union Coll., Cincinnati. *Reappointed* 1895, *but resigned.*
William Henry Maltbie, Ph. D., Associate Professor of Mathematics, Woman's Coll., Baltimore.
Thomas Francis Moran, Ph. D., Professor of History and Economics, Purdue Univ.
Louis Trenchard More, Ph. D., Demonstrator of Physics, Univ. of Neb.
James Flack Norris, Ph. D., Instructor in Chemistry, Mass. Inst. of Tech.
Herbert Dodge Pease, M. B., Bacteriologist, Board of Health, Philadelphia.

1895.

Norman Ross Carmichael, A. M., Assistant in Mathematics, Queen's Univ., Canada.
Arthur Douglas Chambers, Ph. D., Chemist, Ashburn, Mo.
*Franklin Story Conant, Ph. D., Bruce Fellow, 1897.
Rev. Eneas Bernard Goodwin, A. B., Clergyman, Chicago, Ill.
William Jackson Humphreys, Ph. D., Instructor in Physics, Univ. of Va.
Oliver Martin Johnston, Ph. D., Asst. Professor of Romance Lang., Stanford Univ.
Gordon Jennings Laing, Ph. D., Reader in Latin, Bryn Mawr.
*Louis Eugene Livingood, M. D., Assistant in Pathology, 1896-98, and Associate, 1898.
Ebenezer Mackay, Ph. D., Professor of Chemistry and Mineralogy, Dalhousie Univ.
John McLaren McBryde, Jr., Ph. D., Professor of English, Hollins Inst., Va.
Henry Ludwell Moore, Ph. D., Professor of Economics, Smith Coll.
Charles William Peppler, Ph. D., Professor of Greek, Emory Coll., Ga.
Franklin Lafayette Riley, Ph. D., Professor of History, Univ. of Miss.
Frederick George Gottlob Schmidt, Ph. D., Professor of Modern Lang., Univ. of Oregon.
John Adams Scott, Ph. D., Asst. Professor of Greek, Northwestern Univ.
George Otis Smith, Ph. D., U. S. Geological Survey, Washington.
M. Victor Staley, Ph. D., Professor in the Univ. of Washington.
Thomas Hardy Taliaferro, Ph. D., Instructor in Mathematics, Pennsylvania State Coll.
Harry Langford Wilson, Ph. D., Instructor in Latin. *Did not enter on the fellowship.*

1896.

Edward Cooke Armstrong, Ph. D., Instructor in Romance Languages.
James Morton Callahan, Ph. D., Lecturer in Diplomatic History.
Edward Perkins Carter, M. D., Resident Physician, Lakeside Hospital, Cleveland.
Hubert Lyman Clark, Ph. D., Instructor in Biology, Amherst Coll.
Noah Ernest Dorsey, Ph. D., Assistant in Physics.
Pelham Edgar, Ph. D., Professor of Modern Languages, Victoria Univ., Ont.
Edwin Luther Green, Ph. D., Professor of Greek, Central Univ., Ky.
Arthur Sewall Haggett, Ph. D.

William Edwards Henderson, Ph. D., Professor of Chemistry, Ohio Univ.
Charles Hoeing, Ph. D., Instructor in Latin, Univ. of Rochester.—[1896-98].
Duncan Starr Johnson, Ph. D., Assistant in Botany.
Paul Henry Land, A. B., Fellow by Courtesy.
Omera Floyd Long, Ph. D., Instructor in Latin, Northwestern Univ.
William Tyler Mather, Ph. D., Associate Professor of Physics, Univ. of Texas.
Jens Anderson Ness, A. B., Fellow by Courtesy.—[1896-98].
Alexander Pell, Ph. D., Professor of Mathematics, Univ. of South Dakota.
Cornelius William Prettyman, A. B., Assistant in German, Univ. of Pa.
Charles Dabney Ragland, Ph. D., Professor of Chemistry, Randolph Macon Coll.
Frank Roy Rutter, Ph. D., U. S. Geological Survey, Washington.
George Burbank Shattuck, Ph. D., Instructor in Physiographic Geology.

1897.

Cleveland Abbe, Jr., Ph. D., Professor of Geology, Western Maryland Coll.
Charles Hillman Brough, Ph. D., Professor of Economics and History, Mississippi Coll.
Pierce Butler, A. B., now Fellow.—[1897-99].
Killis Campbell, Ph. D., Professor of English, Culver Military Acad., Ind.
Gilman Arthur Drew, Ph. D., Assistant in Zoölogy.
Charles Wilson Greene, Ph. D., Assistant Professor of Physiology, Stanford Univ.
Karl Joseph Grimm, now Fellow.—[1897-99].
James Graham Hardy, Ph. D., Instructor in Mathematics, Williams Coll.
William App Jones, Ph. D., Analytical Chemist, New York City.
William Kurrelmeyer, A. B., now Fellow.—[1897-99].
Guy Carleton Lee, Ph. D., Instructor in Elocution and History.
Charles Elwood Mendenhall, Ph. D., Instructor in Physics, Williams Coll.
Samuel Alfred Mitchell, Ph. D., Research Fellow, Yerkes Observatory, Univ. of Chicago.
Joseph Longworth Nichols, M. D.
William Albert Nitze, A. B., Fellow by Courtesy.
Daniel Allen Penick, Ph. D., Classical Instructor, Hackettstown, N. J.
Ebenezer Emmet Reid, Ph. D , Professor of Chemistry and Physics, Charleston Coll.
William Berney Saffold, Ph. D., Professor of Latin, Univ. of Alabama. *Did not enter on the fellowship.*
Henry Nevill Sanders, A. B., Fellow by Courtesy; Lecturer in Greek, McGill Univ.
Charles William Waidner, Ph. D., Assistant in Physics.

The list of the present holders of Fellowships is given on page 13.
The whole number of Fellows appointed in twenty-three years is 381.

8. Doctors of Philosophy.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1878.

Henry Carter Adams, (F), A. B., Iowa, 1874, Instructor, 1879–81, Lecturer, 1892–94, Lecturer and Assoc. Prof., Cornell, 1879–87.—Prof. of Political Economy, etc., Univ. of Mich.; Statistician, Interstate Commerce Commission.

Thomas Craig, (F), C. E., Lafayette, 1875, U. S. Coast Survey, 1879–81, Instructor, Associate, and Assoc. Prof., 1879–92.—Prof. of Pure Mathematics; Editor of *The American Journal of Mathematics.*

Josiah Royce, (F), A. B., Univ. of Cal., 1875, Asst. Prof. Univ. of Cal., 1878–82.—Prof. of Philosophy, Harvard.

Ernest Gottlieb Sihler, (F), Concordia, 1869, Prof., Concordia Coll., Milwaukee, 1891–92.—Prof. of Latin, N. Y. Univ. (4)

1879.

Maurice Bloomfield, (F), A. M., Furman, 1877, LL. D., Princeton, 1896, Associate and Assoc. Prof., 1881–91.—Prof. of Sanskrit and Compar. Philol.

Samuel Fessenden Clark, (F), Ph. B., Yale, 1878, Asst., 1879–81.—Prof. of Natural History, Williams Coll.

George Bruce Halsted, (F), A. B., Princeton, 1875, Tutor and Instructor, Princeton, 1878–84.—Prof. of Mathematics, Univ. of Texas.

Edward Hart, (F), S. B., Lafayette, 1874.—Prof. of Analytical Chemistry, Lafayette.

William White Jacques, (F), S. B., Mass. Inst. of Tech., 1876, and Lecturer in the Inst., 1885–91.—Elec. Engineer, Boston.

Henry Sewall, (F), S. B., Wesleyan, 1876. Hon. M. D., Univ. of Mich., 1888, M. D., Univ. of Colorado, 1889, Associate in Biology, 1880–82, Prof. Univ. of Mich., 1882–89.—Prof. of Physiology, Univ. of Denver. (6)

1880.

Francis Greenleaf Allinson, (F), A. B., Haverford, 1876, A. B., Harvard, 1877, Asst. Prof., Haverford, 1880–82, Assoc. Prof., Williams, 1892–95.—Assoc. Prof. of Greek Literature, etc., Brown Univ.

Fabian Franklin, (F), Ph. B., Columbian, 1869, Assistant, Associate, Assoc. Prof., and Prof. of Mathematics, 1879–95.—Editor of *The Baltimore News.*

Edwin Herbert Hall, (F), A. B., Bowdoin, 1875, Assistant, 1880–81, Instructor and Asst. Prof., Harvard, 1881–95.—Prof. of Physics, Harvard.

Allan Marquand, (F), A. B., Princeton, 1874, L. H. D., Hobart, 1888.—Prof. of Archæology, etc., Princeton.

Washington Irving Stringham, (F), A. B., Harvard, 1877.—Prof. of Mathematics, Univ. of Cal. (5)

1881.

Louis Bevier, (F), A. B., Rutgers, 1878, Instructor and Adjunct Prof., Rutgers, 1881–92.—Prof. of Greek, Rutgers.

Robert Dorsey Coale, (F), Assistant, 1881–83.—Prof. of Chemistry and Dean (1895–98) of the Medical Faculty, Univ. of Md.

Edward Allen Fay, A. B., Univ. of Mich., 1862.—Vice-Pres. and Prof. of Languages, National Deaf-Mute Coll.

Lawrence Bunting Fletcher, (F), A. B., Columbia, 1877, Instructor in Physics, Wesleyan, 1882–83.—Marlboro, N. Y.

Samuel Garner, A. B., St. John's, 1871, Prof., Univ. of Indiana, 1881–87.—Prof. of Modern Lang., U. S. Naval Acad.

Edward Mussey Hartwell, (F), A. B., Amherst, 1873, and LL. D., 1898, M. D., Miami Med. Coll., 1882, Instructor and Associate, 1883–91, Director of Physical Training, Boston Public Schools, 1891–97.—Sec., Dept. of Municipal Statistics, Boston.

William Thompson Sedgwick, (F), Ph. B., Yale, 1877, Assistant and Associate, 1881–83.—Prof. of Biology, Mass. Inst. of Tech.; Biologist, Mass. Board of Health; Curator, Lowell Inst., Boston.

Christian Sihler, (F), Concordia, 1866, M. D., Univ. of Mich., 1871, Assistant, 1879–80, Instructor and Acting Prof., Western Reserve, 1889–94.—Physician, Cleveland, O.

Edmund Beecher Wilson, (F), Ph. B., Yale, 1878, Assistant, 1881–82, Lecturer, Williams, 1883–84, Assoc. Prof. and Prof., Bryn Mawr, 1885–91.—Prof. of Zoölogy, Columbia. (9)

1882.

James Wilson Bright, (F), A. B., Lafayette, 1877, Assistant, 1882–83, Instructor, Associate, and Assoc. Prof., 1885–93, Instructor, Cornell, 1885.—Prof. of English Philology; Associate Editor of *Modern Language Notes.*

John Franklin Jameson, (F), A. B., Amherst, 1879, and LL. D., 1898, Assistant and Associate, 1882–88, Lecturer, 1890–91. —Prof. of History, Brown Univ.

Mitsuru Kuhara, (F), S. B., Univ. of Tokyo, 1877, Lecturer, Univ. of Tokyo, 1882–87.—Director and Prof. of Chemistry, First Middle School, Tokyo.

Robert Wright Mahon, C. E., Lehigh, 1876, Tutor, Lafayette, 1882–83, Acting Prof., Rose Polytech. Inst., 1888–89.—Chemist, McKeesport, Pa.

*Oscar Howard Mitchell, (F), A. B., Marietta, 1875, Prof. of Mathematics, Marietta Coll., 1882–89. **March* 29, 1889.

George Frederick Nicolassen, (F), A. B., Univ. of Virginia, 1879, Assistant, 1881–82.—Prof. of Greek and German, Southwestern Presbyterian Univ., Tenn.

William Albert Noyes, A. B., Iowa, 1879, Instructor, Univ. of Minn., 1882–83, Prof., Univ. of Tenn., 1883–86.—Prof. of Chemistry, Rose Polytechnic Inst.

Chase Palmer, (F), A. B., 1879, Assistant, Mass. Inst. of Tech., 1882–83, Prof., Mass. Normal School, Salem, 1883–87, Assistant, Tufts Coll., 1887–88, Prof., Wabash Coll., 1888–90.—Prof. of Chemistry, Manual Training High School, Louisville, Ky.

Edward Henry Spieker, (F), A. B., 1879, Instructor and Associate, 1882–88.—Assoc. Prof. of Greek and Latin. (9)

1883.

William John Alexander, (F), A. B., London, 1876, Prof., Dalhousie, 1883–89.—Prof. of English, Toronto.

William Cathcart Day, (F), A. B., 1880, Prof., St. John's Coll., 1883–84 and Univ. of Nashville, 1884–87.—Prof. of Chemistry, Swarthmore Coll.

William Pitt Durfee, (F), A. B., Univ. of Mich., 1876.—Prof. of Mathematics and Dean of the Faculty, Hobart Coll.

Kakichi Mitsukuri, (F), Ph. B., Yale. 1879.—Prof. of Zoölogy, Univ. of Tokyo.

George Stetson Ely, (F), A. B., Amherst, 1878, Prof. of Mathematics, Buchtel, 1883–84.—Examiner, U. S. Patent Office.

Bernard Francis O'Connor, (F), B. ès Lett., Univ. of France, 1874, Instructor and Adjunct Prof. of Romance Lang., Columbia, 1883–91.—New York City. (6)

1884

Herbert William Conn, A. B., Boston Univ., 1881, Assistant, 1883–84.—Prof. of Biology, Wesleyan Univ., Conn.

Ellery William Davis, (F), S. B., Univ. of Wis., 1879, Prof., Florida Agric., 1884–88, and Univ. of S. C., 1888–93.—Prof. of Mathematics, Univ. of Neb.

David Talbot Day, (F), A. B., 1881.—U. S. Geol. Survey, Washington.

John Dewey, (F), A. B., Univ. of Vt., 1879, Instructor and Prof., Univ. of Mich., 1884–94.—Prof. of Philosophy, Univ. of Chicago.

*James Reynolds Duggan, (F). A. B., Mercer, 1877, M. D., Jefferson Med. Coll., 1879, Prof. of Chemistry, Wake Forest, 1886–88. **January* 10, 1888.

William Henry Howell, (F), A. B., 1881, M. D., Univ. of Mich., 1890, Assistant, Associate, and Assoc. Prof., 1884–89, Lecturer and Prof., Univ. of Mich., 1889–92, Assoc. Prof., Harvard, 1892–93.—Prof. of Physiology; Associate Editor of the *Journal of Experimental Medicine.*

Hans Carl Günther von Jagemann, (F), Naumburg Gymnas., 1876, Prof., Earlham, 1884–85, and Indiana Univ., 1885–89.—Asst. Prof. of German, Harvard.

Edward Harrison Keiser, (F), S. B., Swarthmore, 1880, Assistant, 1884–85.—Prof. of Chemistry, Bryn Mawr.

Arthur Lalanne Kimball, (F), A. B., Princeton, 1891, Associate and Assoc. Prof., 1884–91.—Prof. of Physics, Amherst.

Henry Leslie Osborn, (F), A. B., Wesleyan, 1878, Prof., Purdue Univ., 1884–87.—Prof. of Biology and Geology, Hamline Univ.

Charles Albert Perkins, (F), A. B., Williams, 1879, Assistant, 1884–87, Associate, Bryn Mawr, 1887–91, Prof., Hampden Sidney, 1891–92.—Prof. of Physics, etc., Univ. of Tenn.

Albert Shaw, A. B., Iowa, 1879, Reader, 1889–90, Lecturer, 1891–92.—Editor, *The Review of Reviews*, New York.

Henry Newlin Stokes, (F), S. B., Haverford, 1879, Asst. Prof. of Chemistry, Univ. of Chicago, 1893–94.—U. S. Geological Survey, Washington, D. C.

Louis Webb Wilhelm, (F), A. B., 1880.—Mathematical Instructor, Baltimore.

Arthur Yager, A. B., Georgetown, Ky., 1879.—Prof. of History, Georgetown. (15)

1885.

Edward Webster Bemis, A. B., Amherst, 1880, Instructor, Amherst, 1885-86, Adjunct Prof., Vanderbilt, 1886-92, Assoc. Prof., Univ. of Chicago, 1892-95.—Associate Editor, *Bibliotheca Sacra*, Oberlin, O.

Gustav Bissing, (F), A. B., 1882, Examiner, U. S. Patent Office, 1884-97.—Patent Attorney, Washington.

Henry Herbert Donaldson, (F), A. B., Yale, 1879, Assistant, 1883-84, Instructor and Associate, 1885-89, Asst. Prof., Clark Univ., 1889-92. — Prof. of Neurology, Univ. of Chicago.

Louis Duncan, U. S. Naval Academy, 1880, Associate, 1886-89.—Assoc. Prof. of Electricity.

Homer Winthrop Hillyer, (F), S. B., Univ. of Wis., 1882, Instructor, Univ. of Wis., 1885-90.—Asst. Prof. of Organic Chemistry, Univ. of Wisconsin.

Frederic Schiller Lee, (F), A. B., St. Lawrence Univ., 1878, Instructor, St. Lawrence, 1886-87, Associate, Bryn Mawr, 1887-91.—Adjunct Prof. and Demonstrator of Physiology, Columbia.

*Gustav Adolph Liebig, Jr., (F), A. B., 1882, Assistant, 1887-90. **February* 10, 1897.

James Playfair McMurrich, A. B., Toronto, 1879, Instructor, 1884-86, Prof., Haverford, 1886-89, Instructor, Clark, 1889-91, Prof., Univ. of Cincinnati, 1891-94.—Prof. of Anatomy, Univ. of Mich.

Albert Gallatin Palmer, (F), A. B., 1882, Assistant and Asst. Prof., Swarthmore, 1885-87.—Norwood, Md.

Harry Fielding Reid, (F), A. B., 1880, Assistant, 1882-84, Lecturer, 1894-96, Prof., Case School, 1886-94, Assoc. Prof., Univ. of Chicago, 1895-97.—Assoc. Prof. of Geological Physics.

Henry Alford Short, A. B., Columbia, 1880, Tutor, Columbia, 1885-88.—New York.

Morrison Isaac Swift, (F), A. B., Williams, 1879, Instructor in Philosophy, Hobart, Coll., 1882-84.

Henry Alfred Todd, A. B., Princeton, 1876, Instructor and Associate, 1883-91, Prof., Stanford Univ., 1891-93.—Prof. of Romance Philol., Columbia. (13)

1886.

William Shirley Bayley, (F), A. B., 1883.—U. S. Geological Survey; Prof. of Geology and Mineralogy, Colby Univ.

*Adam Todd Bruce, (F), A. B., Princeton, 1881, Instructor in Osteology, etc., 1886-87. **February* 9, 1887.

Davis Rich Dewey, (F), A. B., Univ. of Vt., 1879, Lecturer, 1895-96.—Prof. of Economics, etc., Mass. Inst. of Tech.

William Henry Emerson, (F), U. S. Naval Acad., 1880, Prof., S. C. Military Acad., 1886-88.—Prof. of Chemistry, Ga. School of Technology, Atlanta.

Joseph Auguste Fontaine, College of Sion, France, 1879, Instructor, Univ. of Neb., 1887-89, Prof., Univ. of Miss., 1889-91.—Prof. of Romance Lang., Byrn Mawr.

Elgin Ralston Lovell Gould, (F), A. B., Victoria (Ont.), 1881, Instructor, Washington High School, 1884-87, Reader, 1887-89, Lecturer, 1892-97, Prof., Univ. of Chicago, 1895-96.—President, City and Suburban Homes Co., N. Y.

William Penn Holcomb, B. L., Swarthmore, 1878, Prof. of History, etc., Swarthmore, 1886-94.—Pearl River, N. Y.

Joseph Jastrow, (F), A. B., Univ. of Pa., 1882.—Prof. of Experimental Psychology, Univ. of Wisconsin.

George Theophilus Kemp, (F), A. B., 1883, M. D., Long Island Med. Coll., 1881, Demonstrator, Univ. of Pa., 1886-87, Associate and Assoc. Director, etc., Hoagland Lab., 1888-93.—Prof. of Physiology, Univ. of Illinois.

Charles Herbert Levermore, (F), A. B., Yale, 1879, Instructor, Univ. of Cal., 1886-88, Prof. of History, Mass. Inst. of Tech., 1888-93.—President, Adelphi Coll., Brooklyn.

Gonzalez Lodge, (F), A. B., 1883, Prof., Davidson Coll., 1886-88.—Prof. of Latin, Bryn Mawr.

Charles William Emil Miller, (F), A. B., 1882, Peoria (Ill.) High School, 1888-90, and Walther Coll., St. Louis, 1890-91.—Assoc. Prof. of Greek.

Henry Barber Nixon, (F), Univ. of N. C., 1878.—Prof. of Mathematics, Pennsylvania Coll.

Charles Skeele Palmer, (F), A. B., Amherst, 1879.—Prof. of Chemistry, Univ. of Colorado.

Burr James Ramage, A. B., Newberry, 1880.—Prof. of Common Law and Dean of the Law School, Univ. of the South.

Shosuke Sato, S. B., Sapporo Agric. Coll., 1880.—Acting Director and Prof. of Agricultural Economics, Imperial Coll. of Agriculture, Sapporo, Japan.

Woodrow Wilson, (F), A. B., Princeton, 1876, LL. D., Wake Forest, 1887, Associate and Assoc. Prof., Bryn Mawr, 1885-88, Prof. Wesleyan Univ., 1888-90, Lecturer, 1887-98. — Lecturer, New York Law School; Prof. of Jurisprudence, etc. Princeton. (17)

1887.

Cyrus Adler, (F), A. B., Univ. of Pa., 1883, Instructor, 1887-90, Associate, 1890-93.—Librarian of the Smithsonian Inst.; Prof. of Oriental History and Archæology, Columbian Univ.

Ethan Allen Andrews, (F), Ph. B., Yale, 1881, Instructor and Associate, 1887-92.—Assoc. Prof. of Biology.

Rev. Albert Clayton Applegarth, A. B., 1884.—Clergyman, Chester, Pa.

*David Barcroft, (F), Ph. B., Univ. of Cal., 1882. **August* 2, 1894.

Henry Gustav Beyer, M. D., Bellevue Hospital Med. Coll., 1876, M. R. C. S. (London), Director of Physical Training, U. S. Naval Acad., 1891-95.—Surgeon U.S.N.

Richard Newman Brackett, A. B., Davidson, 1883.—Assoc. Prof. of Chemistry, Clemson Agric. Coll., S. C.

Henry Crew, (F), A. B., Princeton, 1882, Asst., 1887-88, Instructor, Haverford, 1888-91.—Prof. of Physics, Northwestern Univ.

Albert E. Egge, (F), A. B., Luther Coll., 1879, Prof., St. Olaf Coll., 1887-92, Instructor Iowa Univ., 1892-96.—Prof. of English, Washington Agric. Coll.

John Charles Fields, (F), A. B., Toronto, 1884.—Prof. of Mathematics, Allegheny.

Andrew Fossum, A. B., Luther, 1882.—Prof. of Greek, St. Olaf Coll.

Richmond Harding, A. B., Davidson, 1880.—Prof. of Greek, Davidson Coll.

Charles Willard Hayes, (F), A. B., Oberlin, 1883.—U. S. Geol. Survey, Washington.

William Adam Hedrick, A. M., Columbian 1884. — Instructor in the High School, Washington, D. C.

Frank Gaylord Hubbard, A. B., Williams, 1880, Instructor, Smith Coll., 1887-88, and Univ. of Cal., 1888-92.—Prof. of English Lit., Univ. of Wis.

George Benjamin Hussey, (F), A. B., Columbia, 1884, Fellow, Princeton, 1888-90. Instructor and Assoc. Prof., Univ. of Neb., 1891-94.—Docent, Univ. of Chicago.

James Hervey Hyslop, (F), A. B., Wooster, 1877, Instructor, Bucknell, 1888-89.—Prof. of Logic and Ethics, Columbia.

Marion Dexter Learned, (F), A. B., Dickinson, 1880, Instructor, Associate, and Assoc. Prof., 1886-95.—Prof. of German, Univ. of Pa.

William Ridgely Orndorff, (F), A. B., 1884.—Asst. Prof. of Organic Chemistry, Cornell Univ.

Daniel Richard Randall, (F), A. B., St. John's, 1883.—Atty. at Law, Annapolis.

Frederick Morris Warren, A. B., Amherst, 1880, Instructor and Associate, 1886-91.—Prof. of Romance Lang., Adelbert; Lecturer in French Literature. (20)

1888.

William Muss Arnolt, (F), B. D., New Brunswick Theol. Sem., 1882, Instructor, 1891-93, Asst. Prof., Univ. of Mich., 1893-94.—Instructor and Asst. Recorder, Univ. of Chicago.

Philip Wheelock Ayres, (F), Ph. B., Cornell, 1884.—Secretary, Organized Charities, Chicago, Ill.

Louis Bell, (F), A. B., Dartmouth, 1884, Prof. of Physics, etc., Purdue Univ., 1888-89.—Chief Engineer, General Electric Company, Chicago, Ill.

Benjamin Lester Bowen, A. B., Rochester, 1881, Prof., Bowdoin, 1888-89.—Prof. of Romance Lang., Ohio State Univ.

William Henry Burnham, (F), A. B., Harvard, 1882, Instructor, 1888-89.—Instructor in Pedagogy, Clark Univ.

Richard Eugene Burton, A. B., Trinity (Conn.), 1883, Lecturer, 1897-98.—Prof. of English, Univ. of Minn.

John Pendleton Campbell, (F), A. B., 1885.—Prof. of Biology, Univ. of Ga.

Herbert Charles Elmer, (F), A. B., Cornell, 1883.—Asst. Prof. of Latin, Cornell.

Robert Orlando Graham, A. B., Amherst, 1877.—Prof. of Chemistry and Geology, Illinois Wesleyan.

Erasmus Haworth, S. B., Kansas State Univ., 1881, Prof., Oskaloosa Coll., 1882-92.—Assoc. Prof. of Organic Geology, Kansas State Univ.

Francis Hobart Herrick, A. B., Dartmouth, 1881.—Prof. of Biology, Adelbert.

William Herbert Hobbs, (F), S. B., Worcester Polytechnic, 1883.—Asst. Prof. of Mineralogy, etc., Univ. of Wis.

Joseph Hoeing Kastle, (F), S. B., Ky. State Coll., 1884.—Prof. of Chemistry, Ky. State Coll.

Andrew Cowper Lawson, (F), A. B., Toronto, 1883.—Asst. Prof. of Geology and Mineralogy, Univ. of Cal.

Felix Lengfeld, (F), Prof., S. Dakota School of Mines, 1890-91, Instructor, Univ. of Cal., 1891-92.—Asst. Prof. of Inorganic Chemistry, Univ. of Chicago.

Archibald Byron Macallum, A. B., Toronto, 1880.—Assoc. Prof. of Physiology, Univ. of Toronto.

John Ernst Matzke, A. B., Hope Coll., 1882, Prof. Bowdoin Coll., 1889-90, and Indiana Univ., 1890-91, Associate, 1891-93.—Prof. of Romanic Lang., Stanford Univ.

*Thomas McCabe, (F), A. B., 1886, Instructor, Univ. of Mich., 1888-89, Prof., Indiana Univ., 1889-90, Associate in Romance Lang., Bryn Mawr, 1890-91. **February* 22, 1891.

Yujiro Motora, (F), Doshisha Kioto, Japan, 1879.—Prof. of Psychology, Univ. of Tokyo.

Julius Nelson, (F), S. B., Univ. of Wisconsin, 1881.—Prof. of Biology, Rutgers.

George Thomas White Patrick, (F), A. B., Iowa Univ., 1878, B. D., Yale, 1885.—Prof. of Philosophy, Iowa State Univ.

Edmund Clark Sanford, (F), A. B., Univ. of Cal., 1883, Instructor, 1888-89.—Asst. Prof. of Psychology, Clark Univ.

Henry Taber, Ph. B., Yale, 1882, Assistant, 1888-89.—Asst. Prof. of Mathematics, Clark Univ.

Amos Griswold Warner, (F), B. L., Univ. of Neb., 1885, General Agent, Charity Organization Society, Balt., 1887-89, Prof., Univ. of Neb., 1889-91, Superintendent of Charities in the District of Columbia, 1891-93, Lecturer, 1892-93.—Prof. of Economics, Stanford Univ.

John Roaf Wightman, (F), A. B., Toronto, 1871, Prof., Iowa Coll., 1889-91, Assoc. Prof., Univ. of Neb., 1891-93.—Prof. of Romance Lang., Oberlin.

Henry Van Peters Wilson, (F), A. B., 1883, Bruce Fellow, 1888-89.—Prof. of Biology, Univ. of N. C.

Thomas Kimber Worthington, A. B., Haverford, 1883, LL. B., Univ. of Md., 1890.—Baltimore. (27)

1889.

Charles McLean Andrews, (F), A. B., Trinity (Conn.), 1884.—Assoc. Prof. of History, Bryn Mawr.

Frank Wilson Blackmar, (F), Ph. B., Univ. of the Pacific, 1881.—Prof. of History, etc., Univ. of Kansas.

Jeffrey Richardson Brackett, A. B., Harvard, 1883.—Lecturer on Charities, etc.

William Merriam Burton, (F), A. B., Adelbert, 1886.—Superintendent, Standard Oil Company, Whiting, Ind.

Morgan Callaway, Jr., (F), A. B., Emory (Ga.), 1881, Prof., Southwestern Univ., 1889-90.—Assoc. Prof. of English, Univ. of Texas.

Alfred Robert Louis Dohme, A. B., 1886.—Manufacturing Chemist, Balt.

*William Curns Lawrence Gorton, (F), A. B., 1886, Assoc. Prof. and Prof. of Mathematics, Woman's Coll., Balt., 1888-94. **November* 8, 1894.

Joseph Edward Harry, (F), A. B., 1886.—Prof. of Greek and German, Georgetown Coll., Ky.

George Allison Hench, (F), A. B., Lafayette, 1885.—Prof. of German, Univ. of Mich.

Clifton Fremont Hodge, (F), A. B., Ripon, 1882, Instructor, Univ. of Wis., 1891-92.—Asst. Prof. of Physiology, Clark Univ.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886.—Consulting Engineer, N. Y.; Acting Assoc. Prof. of Electricity.

James Thomas Lees, A. B., Adelbert, 1886.—Prof. of Greek, Univ. of Neb.

Archibald MacMechan, (F), A. B., Toronto, 1884.—Prof. of English, Dalhousie.

Charles William Moulton, A. B., Univ. of Minn., 1885.—Prof. of Chemistry, Vassar.

Albion Woodbury Small, A. B., Colby, 1876, Reader, 1888-89, Pres., Colby Univ., 1889-92.—Prof. of Sociology, Univ. of Chicago.

Charles Lee Smith, (F), S. B., Wake Forest, 1884, Instructor, 1889-91, General Sec., Charity Organization Society, Balt., 1889-91.—Prof. of History, William Jewell Coll., Mo.

Kirby Flower Smith, A. B., Univ. of Vt., 1884, Instructor and Associate, 1889-93.—Assoc. Prof. of Latin.

Rev. Lemon Leander Uhl, A. B., Wittenberg (Ohio), 1871.—Missionary in India.

Arthur Clarence Wightman, (F), A. B., Wofford, 1879, Demonstrator, 1889-90, Prof. in Md. Agric. Coll., 1890-91.—Adjunct Prof. of Biology and Physics, Randolph-Macon Coll.

*William Klapp Williams, A. B., 1886.—**June* 4, 1897. (20)

1890.

Joseph Sweetman Ames, (F), A. B., 1886, Assistant, Associate, and Assoc. Prof., 1889-98.—Prof. of Physics.

Edward Carey Applegarth, (F), A. B., 1887, M. D., Coll. of Phys. and Surg., Balt., 1892.—Physician, Balt.

Charles Cotton Blacksbear, A. B., Mercer, 1881, Instructor, Bryn Mawr, 1890-91.—Assoc. Prof. of Chemistry, Woman's Coll., Balt.

Charles Hiram Chapman, (F), A. B., 1888, Instructor and Associate, 1889-92.—President, Univ. of Oregon.

Rudolf John Julius de Roode, Jr., (F), S. B., Ky. State Coll., 1885.—Analytical Chemist, New York City.

George Peter Dreyer, (F), A. B., 1887, Demonstrator, 1890-92.—Associate in Biology.

Edwin Whitfield Fay, (F), A. M., Southwestern Presbyterian Univ., 1883, Instructor, Univ. of Mich., 1890-91, Acting Prof., Univ. of Texas, 1892-93.—Prof. of Latin, Washington and Lee.

Henry Torsey Fernald, S. B., Maine State Coll., 1885.—Prof. of Zoölogy, Pa. State Coll.

Henry Brayton Gardner, (F), A. B., Brown, 1884.—Assoc. Prof. of Political Economy, Brown Univ.

Charles Jaques Goodwin, (F), A. B., Bowdoin, 1887, Prof., Cornell Coll., 1890-92, Tutor, Wesleyan Univ., 1892-95.—Acting Prof. of Greek, St. Stephen's Coll., N. Y.

Charles Homer Haskins, A. B., 1887, Instructor, 1889-90.—Prof. of Institutional History, Univ. of Wisconsin.

James Taft Hatfield, (F), A. B., Northwestern, 1883.—Prof. of German, Northwestern Univ.

John Cohn Hemmeter, M. D., Univ. of Md., 1883.—Clinical Prof. of Medicine, Univ. of Md.; Physician, Balt.

Charles Holmes Herty, Ph. B., Univ. of Ga., 1886.—Adjunct Prof. of Chemistry, Univ. of Ga.

Jesse Herman Holmes, A. B., Univ. of Neb., 1884.—Instructor in Chemistry and Physics, George School, Pa.

Rev. Abel Henry Huizinga, (F), A. B., Hope Coll., 1880, Adjunct Prof., McCormick Theol. Sem., 1894-96.—Clergyman, Fishkill, N. Y.

Toyokichi Iyenaga, Ph. B., Oberlin, 1887.—Prof. of Political Science, Semmo Gakko, Tokyo.

Thomas Logie, (F), A. B., Toronto, 1887, Asst. Prof., Williams Coll., 1890-93.—Assoc. Prof. of Romance Lang., Rutgers, 1893-98.

Hiram Benjamin Loomis, (F), A. B., Trinity (Conn.), 1885, Instructor, Univ. of Wis., 1890-93.—Instructor in Physics, Northwestern Univ.

Herbert William Magoun, (F), A. B., Iowa, 1879, Acting Prof., Colo. Col., 1890-91, and Oberlin, 1892-95.—Prof. of Latin, Redfield Coll., S. Dak.

John Hanson Thomas McPherson, (F), A. B., 1886, Instructor, Univ. of Mich., 1890-91.—Prof. of History, Univ. of Ga.

Wilmot Vernon Metcalf, A. B., Oberlin, 1883.—Prof. of Chemistry and Physics, Carleton Coll.

Thomas Hunt Morgan, (F), S. B., Ky. State Coll., 1886, Bruce Fellow, 1890-91.—Prof. of Biology, Bryn Mawr.

Augustus Taber Murray, (F), A. B., Haverford, 1885, Prof., Earlham Coll., 1888-91, and Colorado Coll., 1891-92.—Prof. of Greek, Stanford Univ.

Wyatt William Randall, A. B., St. John's, 1884, Assistant, 1890-93, Associate, 1893-98.—Science Master, Lawrenceville School.

George Mann Richardson, (F), A. C., Lehigh, 1886, Instructor, Lehigh, 1890-91.—Prof. of Organic Chemistry, Stanford.

Joseph Samuel Shefloe, (F), A. B., Luther, 1885.—Prof. of Romance Lang. and Librarian, Woman's Coll., Balt.

Robert Benson Steele, (F), A. B., Univ. of Wis., 1883, Prof., St. Olaf Coll., 1890-91.—Prof. of Latin, Illinois Wesleyan.

Andrew Stephenson, A. B., De Pauw, 1882, Assoc. Prof., Wesleyan, 1890-94.—Prof. of History, De Pauw Univ.

Frederick Jackson Turner, A. B., Univ. of Wis., 1884.—Prof. of American History, Univ. of Wis.

John Martin Vincent, A. B., Oberlin, 1883, Instructor and Associate, 1890-95.—Assoc. Prof. of History.

Shozaburo Watase, (F), S. B., Sapporo Agric. Coll., 1884, Bruce Fellow, 1889-90, Lecturer and Assistant, Clark Univ., 1890-92.—Asst. Prof. of Cellular Biology, Univ. of Chicago.

James Albert Woodburn, (F), A. B., Indiana Univ., 1876.—Prof. of American History, Indiana Univ. (33)

1891.

Alfred Bagby, Jr., A. B., Richmond, 1885, Adjunct Prof., S. C. Univ., 1891-93.—Atty. at Law, Balt.

James William Black, A. B., 1888, Acting Prof. Georgetown Coll., Ky., 1891-92, Assoc. Prof., Oberlin, 1892-94.—Prof. of History, etc., Colby Univ.

Charles Pliny Brigham, A. B., 1888.—Greenport, Long Island.

Charles Edward Coates, Jr., A. B., 1887, Prof., St. John's, Md., 1891-93.—Prof. of Chemistry, La. State Univ.

Edwin Grant Conklin, (F), S. B., Ohio Wesleyan, 1885, Prof., Ohio Wesleyan, 1891-94, and Northwestern Univ., 1894-95.—Prof. of Compar. Embryology, Univ. of Pa.

Paul Joseph Dashiell, A. B., 1887, Instructor, Lehigh, 1889-90, 1891-92.—Prof. of Chemistry, U. S. Naval Academy.

Hermann Louis Ebeling, (F), A. B., 1882.—Prof. of Greek, Miami Univ.

William Snyder Eichelberger, (F), A. B., 1886, Instructor in Mathematics, etc., Wesleyan Univ., 1891-96.—U. S. Nautical Almanac, Washington.

Thomas Perrin Harrison, (F), S. C. Military Acad., 1886, Assoc. Prof., Clemson Agric. Coll., 1891-95.—Prof. of English, Davidson Coll.

Walter Jones, A. B., 1888, Acting Prof., Wittenberg Coll., 1891-92, Instructor and Prof., Purdue Univ., 1892-95.—Asst. in Physiological Chemistry.

Henry Parker Manning, (F), A. B., Brown, 1883.—Asst. Prof. of Pure Mathematics, Brown Univ.

George Frederick Metzler, A. B., Albert Coll., 1880, Instructor, Univ. of Mich., 1892-93, and Queen's Univ., Ont., 1895-96.

William McCracken Milroy, A. B., Geneva Coll., 1887.—Prof. of Latin, Geneva Coll.

John Leverett Moore, (F), A. B., Princeton, 1881, Tutor, Princeton, 1882-85, Instructor, 1888-89.—Prof. of Latin, Vassar.

Wilfred Pirt Mustard, (F), A. B., Toronto, 1886, Prof., Colorado Coll., 1891-93.—Prof. of Latin, Haverford Coll.

Barker Newhall, (F), A. B., Haverford, 1887, Instructor, Brown Univ., 1892-95, and Bates Coll. (Me.), 1895-96.—Prof. of Greek, Kenyon Coll.

George Petrie, A. M., Univ. of Virginia, 1887.—Prof. of History, Alabama Polytechnic Inst.

Edward Bennett Rosa, (F), S. B., Wesleyan, Conn., 1886.—Prof. of Physics, Wesleyan.

Edward Alsworth Ross, A. B., Coe Coll., 1886, Prof., Indiana Univ., 1891-92, Assoc. Prof., Cornell. 1892-93.—Prof. of Economic Theory and Finance, Stanford.

Charles Edward Saunders, (F), A. B., Toronto, 1888, Prof., Central Univ., Ky., 1891-93.—Ottawa, Canada.

Sidney Sherwood, A. B., Princeton, 1879, Instructor, Univ. of Pa., 1891-92, Assoc., 1892-95.—Assoc. Prof. of Political Economy.

Moses Stephen Slaughter, (F), A. B., Indiana Asbury, 1883, Instructor, Bryn Mawr, 1887-88, Prof., Iowa Coll., 1889-96.—Prof. of Latin, Univ. of Wis.

Bernard Christian Steiner, (F), A. B., Yale, 1888, LL. B., Univ. of Md., 1894, Instructor, Williams, 1891-92.—Librarian, Pratt Library, Balt.; Prof. and Dean, Balt. Univ. School of Law; Associate in History.

William Howe Tolman, A. B., Brown, 1882, General Agent, Poor Assoc., N. Y., 1894-98.—Sec., League for Social Service, N. Y.

Stephen Beauregard Weeks, A. B., Univ. of N. C., 1886, Prof., Trinity Coll., N. C., 1891-93.—Editor, U. S. Bureau of Education.

John White, Jr., (F), A. B., 1888, Assistant, Cornell, 1891-93.—Instructor in Chemistry, Univ. of Neb.

Westel Woodbury Willoughby, (F), A. B., 1888, Acting Asst. Prof., Stanford, 1894-95.—Associate in Political Science.

Arthur Burnham Woodford, Ph. B., Yale, 1881, Instructor, Univ. of Pa., 1891-92.—Prof., Coll. of Social Economics, New York; Lecturer, New York Univ.

(28)

1893.

Eugene Thomas Allen, A. B., Amherst, 1887, Acting Prof., Univ. of Colo., 1892-93, Assistant, Harvard, 1894-95.—Instructor in Chemistry, Mo. School of Mines, Rolla.

William Wilson Baden, (F), A. B., 1881, LL. B., Univ. of Md., 1883, Prof. of Greek, Southwestern Univ., 1892-93, and Central Univ., 1893-96.—Fellow by Courtesy.

Robert Payne Bigelow, (F), S. B., Harvard, 1887, Bruce Fellow, 1891-93.—Instructor in Biology and Librarian, Mass. Inst. of Tech.; Editor in Chief, *American Naturalist.*

Edwin Winfield Bowen, A. B., Randolph Macon, 1887, Asst. Prof., Univ. of Mo., 1892-93.—Prof. of Latin, Randolph Macon Coll.

Immanuel Moses Casanowicz.—Aid, Division of Historic Archæology, U. S. National Museum, Washington.

Starr Willard Cutting, A. B., Williams, 1887.—Assoc. Prof. of German, Univ. of Chicago.

Rev. William Levering Devries, (F), A. B., 1888, S. T. B., General Theol. Sem., N.Y., 1894.—Clergyman, Washington, D. C.

Albert Bernhardt Faust, (F), A. B., 1889, Instructor, 1894-96.—Assoc. Prof. of German, Wesleyan Univ.

George Wilton Field, A. B., Brown 1887, Assoc. Prof., Brown Univ., 1893-96.—Biologist, R. I. Agric. Exper. Station.

Joseph Elliott Gilpin, A. B., 1889.—Assoc. in Chemistry.

John Leslie Hall, (F).—Prof. of English and History, William and Mary Coll.

William Asbury Harris, (F), A. M., Richmond, 1886, Acting Prof., Ripon, 1892-93.—Prof. of Greek, Baylor Univ.

Frederick Clemson Howe, A. B., Allegheny, 1889.—Atty. at Law, Cleveland; Lecturer, Western Reserve Univ.

William Isaac Hull, A. B., 1889.—Prof. of History, etc., Swarthmore Coll.

Harry Clary Jones, (F), A. B., 1889.—Assoc. in Physical Chemistry.

James Lawrence Kellogg, (F), S. B., Olivet, 1888.—Prof. of Biology, Olivet Coll.

Charles Rollin Keyes, (F), S. B., Iowa State Univ., 1887, late State Geologist of Missouri.

Elmer Peter Kohler, (F), A. B., Muhlenberg, 1886.—Assoc. in Chemistry, Bryn Mawr.

*Paul Erasmus Lauer, (F), A. B., Adelbert, 1885, Assistant Supt. of Schools, Cleveland, 1892-93. **February* 20, 1893.

Edwin Seelye Lewis, (F), A. B., Wabash, 1888.—Asst. Prof. of Romance Lang., Princeton.

David Judson Lingle, (F), S. B., Chicago, 1885.—Instructor in Physiology, Univ. of Chicago.

Alvin Frank Linn, (F), A. B., Wittenberg, 1884.—Prof. of Chemistry and Mineralogy, Wittenberg Coll.

James Alexander Lyman, A. B., Beloit, 1888, Docent, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Portland Academy, Oregon.

John Hanson Thomas Main, (F), A. B., Moore's Hill, 1880.—Prof. of Greek, Iowa Coll.

Frank Jewett Mather, Jr., (F), A. B., Williams, 1889.—Instructor in English, Williams Coll.

Michael Andrew Mikkelsen, (F), A. B., Luther, 1886.—Montclair, N. J.

Robert Milton Parks, Jr., A. B., Indiana Univ., 1879, Prof., Furman Univ., 1892-3.—Prof. of Chemistry, Central Univ., Ky.

Charles Lane Poor, (F), S. B., Coll. of the City of New York, 1886, Instructor and Associate, 1891-95.—Assoc. Prof. of Astronomy.

John Dyneley Prince, (F), A. B., Columbia, 1888.—Prof. of Semitic Lang., New York Univ.

John Cunningham Robertson, (F), A. M., Univ. of Va., 1885.—Prof. of Greek, St. Stephen's Coll., N. Y.

Charles Hunter Ross, (F), S. B., Ala. Agric., 1886.—Prof. of Modern Lang., Ala. Polytechnic Inst.

Harry Luman Russell, S. B., Univ. of Wis., 1888.—Asst. Prof. of Bacteriology, Univ. of Wis.

William Amasa Scott, A. B., Univ. of Rochester, 1886.—Prof. of Economic History and Theory, Univ. of Wis.

Will Bush Shober, A. B., St. John's, 1885, Instructor in Chemistry, Lehigh Univ., 1892-96.—Cumberland, Md.

Martin Bell Stubbs, A. B., Haverford, 1888.—Instructor in Chemistry, Haverford.

Harry Maas Ullmann, A. B., 1889, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh.

Bert John Vos, (F), A. B., Univ. of Mich., 1888, Instructor, Univ. of Chicago, 1892-93.—Assoc. Prof. of German. (37)

1893.

Henry Harold Ballard, A. B., 1888, Instructor in Chemistry, Rose Polytech. Inst., 1893-96.—Science Master, Country School for Boys, Balt.

Florence Bascom, S. B., Univ. of Wis., 1884, Instructor, Ohio State Univ., 1893-95.—Lecturer in Geology, Bryn Mawr.

Jasper Luther Beeson, A. B., Univ. of Ala., 1889.—Prof. of Chemistry and Physics, Ga. Normal and Industrial Coll.

Alexander Mitchell Carroll, (F), A. M., Richmond, 1888, Prof. of Greek, Richmond Coll., 1895-97.—Reader in Classical Archæology.

Andrew Fuller Craven, LL. B., Univ. of Chicago, 1870, A. B., Harvard, 1889.—Prof. of Economics, Columbian Univ.

John Bascom Crenshaw, A. M., Randolph-Macon, 1881.—Instr. in Physical Culture.

Ulysses Sherman Grant, (F), S. B., Univ. of Minn., 1888.—Asst. State Geologist, Minneapolis.

David I. Green, A. B., Alfred Univ., 1885.—Superintendent, Organized Charities, Hartford, Conn.

William Richard Grey, A. B., Davidson, 1884.—Prof. of Latin and French, Davidson Coll.

George Henry Haynes, A. B., Amherst, 1887.—Prof. of History and Political Science, Worcester Polytech. Inst.

Charles Downer Hazen, A. B., Dartmouth, 1889.—Prof. of History, Smith Coll.

Frank Irving Herriott, A. B., Iowa, 1890.—Prof. of Economics, Iowa Coll.

David Hull Holmes, (F), A. B., Ohio Wesleyan, 1885, Acting Prof., Allegheny Coll., 1893-94, Prof., Univ. of Kansas, 1896-97.—Classical Instructor, New York City.

Arthur John Hopkins, (F), A. B., Amherst, 1885, Prof., Westminster Coll., 1893-94.—Asst. Prof. of Chemistry, Amherst.

Theodore Hough, (F), A.B., 1886, Instructor, McDonogh School, 1886-89.—Asst. Prof. of Biology, Mass. Inst. of Tech.

James Alton James, (F), B. L., Univ. of Wis., 1888, Prof., Cornell Coll., 1893-96.—Prof. of History, Northwestern Univ.

Henry Read McIlwaine, A. B., Hampden-Sidney, 1884.—Prof. of English and History, Hampden-Sidney Coll.

Louis Emil Menger, (F), A. B., Mississippi Coll., 1888, Instructor and Associate, 1893-97.—Assoc. Prof. of Romance Philol., Bryn Mawr.

Colyer Meriwether, A. B., 1886, Instructor in Sendai, Japan, 1889-92.—Instructor, Washington High School.

*Lucius Salisbury Merriam, (F), S. B., Vanderbilt, 1889, Instructor in Political Econ., Cornell, 1893. **November* 18, 1893.

Maynard Mayo Metcalf, (F), A. B., Oberlin, 1889, Bruce Fellow, 1893.—Prof. of Biology, Woman's Coll., Balt.

Daniel Alexander Murray, (F), A. B., Dalhousie, 1884, Assoc. Prof., New York Univ., 1890-94.—Instructor in Mathematics, Cornell.

William Peters Reeves, A. B., 1889, Assistant, Union Coll., 1895-97.—Instructor in English, Iowa State Univ.

Charles Alphonso Smith, A. B., Davidson, 1884.—Prof. of English, La. State Univ.

George Owen Squier, (F), U. S. Mil. Acad., 1887.—First Lieut., U. S. A.; Instructor, Artillery School, Fortress Monroe.

John Nesbit Swan, A. B., Westminster Coll., Pa., 1886.—Prof. of Chemistry, Monmouth Coll.

Frederick Tupper, Jr., (F), A. B., Charleston, 1890, Prof., Wells Coll., 1893-94.—Prof. of Rhetoric and English Lit., Univ. of Vt.

Frank Alfred Wolff, Jr., (F), A. B., 1890.—Chemist, Dept. of Agric., Washington.

(28)

1894.

James Nesbit Anderson, A. M., Univ. of Va., 1887, Prof. of Latin and Greek, Univ. of Oklahoma, 1894-96.

John Spencer Bassett, (F), A. B., Trinity (N. C.), 1888.—Prof. of History, Trinity Coll., N. C.

William Julian Albert Bliss, A.B., Harvard, 1888, Assistant, 1890-91, 1895-97, Lecturer, 1894-95, Instructor, Woman's Coll., Balt., 1894-95.—Associate in Physics.

James Douglas Bruce, A. M., Univ. of Va., 1883.—Assoc. Prof. of English Philology, Bryn Mawr.

James Dowden Bruner, A. B., Franklin Coll., 1888, Prof., Univ. of Ill., 1893-95.—Asst. Prof. of Romance Lang., Univ. of Chicago.

John Emery Bucher, A. C., Lehigh, 1891, Instructor, Tufts Coll., 1894-97.—Asst. Prof. of Chemistry, Rhode Island Agric. Coll.

Frank Kenneth Cameron, A. B., 1891, Asst. Prof., Catholic Univ., 1895-97.—Assistant in Physical Chemistry, Cornell.

William Embert Chamberlin, A. B., Oberlin, 1887, Instructor, Wabash Coll., 1894-95.—Chemist, New York City.

Abraham Cohen, (F), A. B., 1891.—Associate in Mathematics.

Louis Leaming Forman, A. M., Univ. of Pa., 1890.—Instructor in Greek, Cornell.

Edward Curtis Franklin, S. B., Univ. of Kan., 1888.—Assoc. Prof. of Chemistry, Univ. of Kansas.

Joseph Hendren Gorrell, A. B., Washington and Lee, 1888.—Prof. of Modern Lang., Wake Forest Coll.

George Perry Grimsley, A. B., Ohio State Univ., 1890.—Prof of Geology, etc., Washburn Coll.

Ross Granville Harrison, (F), A. B., 1889, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894-95.—Associate in Anatomy.

Robert Nelson Hartman, A. B., Pa. Coll., 1891.—Instructor in Chemistry, Tufts.

Jacob H. Hollander, (F), A. B., 1891, Sec., Special Monetary Commission of the U. S., 1897.—Associate in Economics.

Lorrain Sherman Hulburt, A. B., Univ. of Wis., 1883, Prof., Univ. of S. Dakota, 1887-91, Fellow, Clark Univ., 1891-92, Instructor and Associate, 1892-97.—Collegiate Prof. of Mathematics.

Masanobu Ishizaka, Ph. B., Albion Coll., 1891.—Lecturer in History and Economics, Mie-Ji-Gaku-In, Tokio.

Thomas Atkinson Jenkins, A. B., Swarthmore, 1887.—Instructor in Romance Lang., Vanderbilt.

Christopher Johnston, (F), A. M., Univ. of Va., 1879, M. D., Univ. of Md., 1880, Instructor, 1891-94.—Associate in the Semitic Lang.

Emory Bair Lease, (F), A. B., Ohio Wesleyan, 1885, Prof., Allegheny Coll., 1894-96.—Asst. Prof. of Latin, Univ. of Mich.

Arthur Stanley Mackenzie, (F), A. B., Dalhousie, 1885.—Prof. of Physics, Bryn Mawr.

*Edward Payson Manning, (F), A. B., Brown, 1889, Instructor, St. Lawrence Univ., 1894-95. **February* 15, 1897.

Charles Carroll Marden, A. B., 1889, Instructor, Univ. of Mich., 1890-91, Instructor, 1894-97.—Associate in Romance Lang.

Edward Bennett Mathews, (F), A. B., Colby, 1891.—Associate in Mineralogy.

Philip Randle Moale, A. B., 1889.—Chemist, Asheville, N. C.

Constance Pessels, B. L., Univ. of Texas, 1886.—Instructor in English, Univ. of Texas.

Jesse Siddall Reeves, S. B., Amherst, 1891.—Richmond, Ind.

Arthur Percy Saunders, (F), A. B., Toronto, 1890, Instructor, Univ. of Wis., 1894-96.—Assistant in Chemistry, McGill Univ.

Robert Lincoln Slagle, A. B., Lafayette, 1887.—Prof. of Chemistry, S. Dakota School of Mines.

Rev. Daniel Gurden Stevens, Jr., (F), A. B., 1891, B. D., Crozer Theol. Sem., 1897.—Clergyman, Balt.

Frederick Henry Sykes, (F), A. B., Toronto, 1885, Prof., Western Univ. (Ont.), 1895-97.—University Extension Lecturer, and Editor of *The Citizen*, Phila.

Milo Scott Walker, Ph. B., Wooster, 1889.—Instructor in Chemistry and Physics, Racine (Wis.) High School.

George Francis Weida, (F), Prof., Blackburn Univ., 1894-96, and Baker Univ., 1896-97.—Prof. of Pure Chemistry, Kansas Agric. Coll. (34)

1895.

Rufus Mather Bagg, A. B., Amherst, 1891, Assistant, 1895-97.—Prof. of Geology, Colorado Coll.

Thomas Stockham Baker, (F), A. B., 1891.—Associate in German.

James Curtis Ballagh, A. B., 1894.—Associate in History.

Daniel Base, A. B., 1891.—Assoc. Prof. of Chemistry, Md. Coll. of Pharmacy.

Henry Marvin Belden, A. B., Trinity (Conn.), 1888.—Assoc. Prof. of English, Univ. of Missouri.

Arthur Fisher Bentley, (F), A. B., 1892, late Docent, Univ. of Chicago.—Journalist, Chicago.

Samuel Walker Beyer, (F), S. B., Iowa Agric., 1889.—Assoc. Prof. of Geology, Iowa Agric. Coll.

*William Bromwell, A. B., 1888, Instructor in Chemistry, Pratt Inst., Brooklyn, 1896-98. **September* 30, 1898.

Clarence Griffin Child, (F), A. B., Trinity (Conn.), 1886.—Asst. Editor, Worcester's Dictionary; Instructor in English, Univ. of Pa.

Fonger De Haan, (F), Assistant, Instructor, and Associate, 1894-97.—Associate in Spanish, Bryn Mawr.

Charles Sumner Estes, A. B., Colby, 1884.—Prof. of Latin, Furman Univ., S. C.

Henry Fay, A. B., Lafayette, 1889.—Instructor in Chemistry, Mass. Inst. of Tech.

Henry Stewart Gane, (F), A. B., Amherst, 1891.—U. S. Geol. Survey, Washington.

George William Gray, A. B., 1890.—Chemist, Standard Oil Company, Whiting, Ind.

John Joseph Griffin, A. B., Ottawa Univ., 1881.—Prof. of Chemistry, Catholic Univ.

William August Haussmann, (F), A. B., 1892.—Instructor, Allegheny (Pa.) High School.

John Haynes, A. B., Williams, 1888.—Prof. of History, etc., Free Academy, Norwich, Conn.

Samuel Rivers Hendren, A. B., Washington and Lee, 1892.—Staunton, Va.

Howard Haines Higbee, A. B., Yale, 1884, Assistant, Tufts Coll., 1895-96.—Assistant in Chemistry, Hamilton Coll.

Rockwell Dennis Hunt, Ph. B., Napa Coll., 1890.—Prof. of History, etc., Univ. of the Pacific.

Joseph Rufus Hunter, A. B., Wake Forest, 1885.—Prof. of Chemistry, Richmond Coll.

George Wesley Johnston, (F), A. B., Toronto, 1886, Acting Asst. Prof., Cornell, 1895-96.—Lecturer in Latin, Univ. of Toronto.

Thomas Franklin Kane, (F), A. B., De Pauw, 1888.—Prof. of Latin, Olivet Coll.

William Jay Karslake, S. B., Lafayette, 1891, Instructor, Dalhousie Univ., 1895-96.—Prof. of Chemistry, Butler Univ.

George Charles Keidel, (F), A. B., 1889.—Associate in Romance Lang.

William Hamilton Kirk, (F), A. B., 1893.—Instructor in Latin, Vanderbilt.

John Holladay Latane, A. B., 1892.—Prof. of History, etc., Randolph-Macon Woman's Coll., Lynchburg, Va.; Lecturer in American Diplomatic History.

Exum Percival Lewis, S. B., Columbian, 1888.—Asst. Prof. of Physics, Univ. of Cal.

William Henry Maltbie, (F), A. B., Ohio Wesleyan, 1890.—Assoc. Prof. of Mathematics, Woman's Coll., Balt.

Solomon Reid McKee, A. B., Davidson, 1888.—Prof. of Chemistry, Ogden Coll.

Thomas Francis Moran, (F), A. B., Univ. of Mich., 1887.—Prof. of History, etc., Purdue Univ.

Louis Trenchard More, (F), Ph. B., Washington Univ., 1892, Instructor, Worcester Polytech., 1895-96.—Demonstrator of Physics, Univ. of Neb.

Anthony Moultrie Muckenfuss, A. B., Wofford, 1889.—Prof. of Chemistry, Millsaps Coll., Miss.

Lyman Churchill Newell, Ph. B., Brown, 1890.—Instructor in Chemistry, Normal School, Lowell, Mass.

James Flack Norris, (F), A. B., 1892.—Instructor in Chemistry, Mass. Inst. of Tech.

Edwin Fitch Northrup, (F), A. B., Amherst, 1891, Assoc. Prof. of Physics, Univ. of Texas, 1896-97.—Westinghouse Co., Wilkensburg, Pa.

Robert Somerville Radford, B. Ph., Univ. of Va., 1889, Ph. D., 1891, and A. M., 1892, Instructor, Acad. of Northwestern Univ., 1895-96, St. Joseph High School, 1896-97.—Prof. of Latin, Washburn Coll.

René de Saussure, École Polytechnique, Paris.—Prof. of Mathematics, Catholic Univ.

Thomas Edward Shields, A. M., St. Mary's Sem., 1892.—Instructor in Biology, St. Paul's Theol. Sem., Minn.

John Archer Silver, A. B., Princeton, 1886.—Prof. of History, Hobart Coll.

Alfred William Stratton, (F), A. B., Toronto, 1887.—Associate in Sanskrit, Univ. of Chicago.

William Stuart Symington, Jr., A. B., 1891, Assoc. Prof., Stanford, 1894-95.—Prof. of Romance Lang., Amherst.

Massayoshi Takaki, S. B., Syracuse, 1891.—Tokyo, Japan.

Robert Richardson Tatnall, S. B., Haverford, 1890.—Instructor in Physics, Univ. of Pa.

Thaddeus Peter Thomas, B. P., Univ. of Tenn., 1885.—Assoc. Prof. of History, Woman's Coll., Balt.

James Waddell Tupper, A. B., Dalhousie, 1891.—Prof. of English, Western Univ., Ont.

William Achenbach Wetzel, A. B., Lafayette, 1891.—Ackermanville, Pa. (47)

1896.

Benjamin William Arnold, Jr., A. B., Randolph-Macon, 1891.—Fellow by Courtesy.

George Melville Bolling, (F), A. B., Loyola, 1891.—Asst. Prof. of Compar. Philology, Catholic Univ.

Ferdinand Bonnotte.—Prof. of Modern Lang., Western Md. Coll.

Alfred Cookman Bryan, A. B., 1892.—Instructor in Economics, Washington High School.

Arthur Douglas Chambers, (F), A. B., Toronto, 1892.—Chemist, Ashburn, Mo.

Julian Alvin Carroll Chandler, A. B., William and Mary, 1891.—Prof. of History and English, Richmond Coll.

James Wilkinson Chapman, Jr., A. B., Washington (Md.), 1892, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.

Henry Scofield Cooley, S. B., New York Univ., 1891.—Instructor in History, Ridgeville Coll., Ind.

Henry Rushton Fairclough, (F), A. B., Toronto, 1883, Lecturer, Toronto, 1887-93.—Assoc. Prof. of Greek and Latin, Stanford.

Edson Fessenden Gallaudet, A. B., Yale, 1893.—Instructor in Physics, Yale.

William Francis Gallaway, (F), A. B., 1891.—Classical Instructor, Savannah, Ga.

Frederick Stearns Hollis, S. B., Mass. Inst. of Tech., 1890.—Newton Highlands, Mass.

Reid Hunt, (F), A. B., 1891, M. D., Phys. and Surg. (Balt.), 1896, Tutor in Physiology, Columbia, 1896-98.—Associate in Pharmacology.

Charles William Leverett Johnson, (F), A. B., 1891.—Instructor in Greek, Yale.

Oliver Martin Johnston, (F), A. B., Mississippi Coll., 1890, Lecturer, Bryn Mawr, 1896-97.—Asst. Prof. of Romanic Lang., Stanford Univ.

Frederick Robertson Jones, A. B., Western Md., 1892, Instructor, Western Md., 1896-97.—Instructor in History, Union Coll.

James Pinckney Kinard, S. C. Mil. Acad., 1886.—Prof. of English, Winthrop School, S. C.

Henry McElderry Knower, (F), A. B., 1890, Bruce Fellow, 1895-96, Instructor in Biology, Williams, 1896-97.—Fellow by Courtesy.

Gordon Jennings Laing, (F), A. B., Toronto, 1891, Fellow, Amer. School of Classical Studies, Rome, 1896-97.—Reader in Latin, Bryn Mawr.

George Lefevre, (F), A. B., 1891, Bruce Fellow, 1895-97, Assistant, 1897-98.—Science Master, Boys' High School, Atlanta.

Ebenezer Mackay, (F), A. B., Dalhousie, 1886.—Prof. of Chemistry and Mineralogy, Dalhousie.

Raphael Monroe McKenzie, S. B., New York Univ., 1850.—Rahway, N. J.

Henry Ludwell Moore, (F), A. B., Randolph-Macon, 1892, Instructor, 1896-97.—Prof. of Economics, Smith Coll.

Franklin Lafayette Riley, (F), A. B., Miss. Coll., 1889, Pres. Hillman Coll., 1896-97.—Prof. of History, Univ. of Miss.

Brantz Mayer Roszel, (F), A. B., 1889.—Instructor in Physics, Washington High School.

Herbert Armistead Sayre, B. E., Univ. of Ala., 1893, Prof., Ursinus Coll., 1896-98.—Prof. of Physics, etc., Univ. of Ala.

Frederick George Gottlob Schmidt, (F), Acting Prof., Cornell Coll., 1896-97.—Prof. of Modern Lang., Univ. of Oregon.

Thomas Stanley Simonds, A. B., Harvard, 1884.—Prof. of Latin, Hobart Coll.

George Otis Smith, (F), A. B., Colby, 1893.—U. S. Geol. Survey, Washington.

Michael Druck Sohon, A. C., Lehigh, 1890, and M. S., 1894.—Instructor in Organic Chemistry, Lehigh.

Francis Edgar Sparks, A. B., 1893.—Archivist, Md. Historical Society.

Frederic William Speirs, S. B., Worcester Polytech., 1888.—Prof. of Economics, Drexel Inst., Phila.

Arthur Coe Spencer, S. B., Case School, 1892.—U. S. Geol. Survey, Washington.

Thomas Hardy Taliaferro, (F), C. E., Va. Mil. Inst., 1890.—Instructor in Mathematics, Pa. State Coll.

John Thorne, A. B., Denison, 1885.—Balt.

Harry Langford Wilson, (F), A. B., Queen's Univ. (Ont.), 1887.—Instructor in Latin.

(36)

1897.

Gellert Alleman, S. B., Pennsylvania Coll., 1893, Instructor, Univ. of Maine, 1897-98.—Instructor in Chemistry, Washington Univ., St. Louis.

Edward Cooke Armstrong, (F), A. B., Randolph-Macon, 1890.—Instructor in Romance Lang.

Byron Briggs Brackett, A. B., Syracuse, 1890, Instructor, Union Coll., 1897-98.—Acting Instructor in Physics, Washington High School.

James Morton Callahan, (F), A. B., Indiana Univ., 1894, Lecturer, Hamilton Coll., 1897-98.—Lecturer in Diplomatic History.

Hubert Lyman Clark, (F), A. B., Amherst, 1892.—Instructor in Biology, Amherst.

Frank Hollinger Clutz, (F), A. B., Midland, 1892.—Instructor, Midland Coll.

*Franklin Story Conant, (F), A. B., Williams, 1893, Bruce Fellow, 1897. **September* 13, 1897.

William Scofield Day, A. B., Columbia, 1884.—Assistant in Physics, Columbia.

Noah Ernest Dorsey, (F), A. B., 1893.—Assistant in Physics.

Pelham Edgar, (F), A. B., Toronto, 1892.—Prof. of Modern Lang., Victoria Univ., Ont.

Samuel Eagle Forman, A. B., Dickinson, 1887.—Director of Teachers' Institutes in Maryland.

William Ritchie Fraser, A. B., Dalhousie, 1882.—Classical Instructor, Irvington, N. Y.

Edwin Luther Green, (F), A. B., Washington and Lee, 1892.—Prof. of Greek, Central Univ., Ky., 1898-99.

Arthur Sewall Haggett, (F), A. B., Bowdoin, 1893.

William Edwards Henderson, (F), A. B., Wooster, 1891.—Prof. of Chemistry, Ohio Univ.

William Jackson Humphreys, (F), A. B., Washington and Lee, 1886.—Instructor in Physics, Univ. of Va.

Rev. Bartlett Burleigh James, A. B., Western Md., 1891.—Clergyman, Charmian, Pa.

Duncan Starr Johnson, (F), S. B., Wesleyan, 1892, Bruce Fellow, 1897-98.—Assistant in Botany.

Edwin Wexler Kennedy, A. B., Univ. of Tenn., 1880, Instructor, Woman's Coll., Balt., 1895-97.—Superintendent of Schools, Union City, Tenn.

Francis Plaisted King, (F), A. B., Colby, 1890, Asst. State Geologist of Georgia, 1893-96.—Portland, Me.

Omera Floyd Long, (F), A. B., Ky. Wesleyan, 1890.—Instructor in Latin, Northwestern Univ.

William Tyler Mather, (F), A. B., Amherst, 1886, Assistant, 1897.—Assoc. Prof. of Physics, Univ. of Texas.

John McLaren McBryde, Jr., (F), A. B., Univ. of S. C., 1890.—Prof. of English, Hollins Inst., Va.

John Frederick Mohler, (F), A. B., Dickinson, 1887.—Prof. of Physics, Dickinson.

Charles Patrick Neill, A. B., Georgetown, 1891.—Assoc. Prof. of Economics, Catholic Univ.

Robert Stewart Norris, S. B., Univ. of Cal., 1892.—Chemist, Experiment Sta., Middletown, Conn.

Philip Ogden, A. B., Cornell, 1891.—Instructor in Romance Lang.

Nathan Allen Pattillo, S. B., Southern Univ., 1887.—Prof. of Mathematics, Normal Coll., Florence, Ala.

Alexander Pell, (F).—Prof. of Mathematics, Univ. of S. Dakota.

Charles Dabney Ragland, (F), A. B., Randolph-Macon, 1889.—Prof. of Chemistry, Randolph-Macon.

Milton Reizenstein, A. B., 1894.—Agent, Baron Hirsch Foundation, N. Y.

Frank Roy Rutter, (F), A. B., 1894.—U. S. Geological Survey, Washington.

John Adams Scott, (F), A. B., Northwestern, 1891.—Asst. Prof. of Greek, Northwestern Univ.

George Burbank Shattuck, (F), S. B., Amherst, 1892.—Instructor in Geology.

George Shipley, A. B., Randolph-Macon, 1887.—English Master, Boys' Latin School; Asst. Editor, *The Baltimore American.*

Charles Peter Sigerfoos, S. B., Ohio State Univ., 1889, Assistant in Zoology, 1895-97.—Asst. Prof. of Biology, Univ. of Minn.

Enoch Walter Sikes, A. M., Wake Forest, 1891.—Prof. of Political Science and History, Wake Forest.

William Bull Stoddard, S. B., Univ. of Colo., 1894.—Instructor in Chemistry, Colo. School of Mines.

Hugo Paul Thieme, A. B., 1893, Asst. Prof., Earlham Coll., 1897-98.—Instructor in French, Univ. of Mich.

George Washington Ward, A. B., Western Md., 1890.—Prof. of History, etc., Western Md. Coll.

Louis Napoleon Whealton, A. B., Western Md., 1892, LL. B., Univ. of Md., 1897.—Atty. at Law, N. Y.

Charles Francis Woods, Jr., A. B., 1891.—Prof. of Modern Lang., Woman's Coll., Richmond, Va. (42)

1898.

Cleveland Abbe, Jr., (F), A. B., Harvard, 1894.—Prof. of Geology, Western Md. Coll.

Howard Bell Arbuckle, A. B., Hampden-Sidney, 1889.—Instructor in Sciences, Decatur, Ga.

Arthur Henry Baxter, A. B., 1894.—Modern Lang. Master, Country School for Boys, Balt.

Ernest Julius Becker, A. B., 1894.—Fellow by Courtesy.

Charles Hillman Brough, (F), A. B., Mississippi Coll., 1894.—Prof. of Economics and History, Mississippi Coll.

Murray Peabody Brush, A. B., Princeton, 1894.—Instructor in Romance Lang., Ohio State Univ.

Killis Campbell, (F), A. B., William and Mary, 1894.—Prof. of English, Culver Military Acad., Ind.

Charles Gilpin Cook, S. B., Haverford, 1892.—Balt.

Frederick Henry Duryea Crane, A. B., Union, 1893.—Montclair, N. J.

Gilman Arthur Drew, (F), S. B., Iowa, Univ., 1890, Bruce Fellow, 1898.—Assistant in Zoology.

William Alexander Eckels, A. B., Dickinson, 1883, Prof. in Ripon Coll., 1891-98.—Fellow by Courtesy.

John Eiesland, A. B., Univ. of S. Dak., 1891.—Prof. of Mathematics, Thiel Coll., Pa.

Charles Wilson Greene, (F), A. B., Stanford, 1892.—Asst. Prof. of Physiology, Stanford.

James Graham Hardy, (F), A. B., Lafayette, 1894.—Instructor in Mathematics, Williams.

Lancelot Minor Harris, A. B., Washington and Lee, 1888, Instructor and Asst. Prof., Indiana Univ., 1894-98.—Prof. of English, Charleston Coll., S. C.

Caleb Notbohm Harrison, B. C. E., Univ. of Wis., 1882.—Graduate Student.

Charles Hoeing, (F), A. B., Ky. State Coll., 1890.—Instructor in Latin, Univ. of Rochester.

William App Jones, (F), A. B., Wake Forest, 1893.—Analytical Chemist, N. Y.

Percy Lewis Kaye, A. B., Iowa Univ., 1895.—Instructor in History, Iowa Univ.

Samuel Shipman Kingsbury, A. B, Marietta, 1893.—Pittsburg, Pa.

Guy Carleton Lee, (F), A. B., Dickinson, 1895.—Instructor in Elocution and History.

Arthur Gray Leonard, A. B., Oberlin, 1889. —Oberlin, O.

Charles Elwood Mendenhall, (F), S. B., Rose Polytech., 1894. — Instructor in Physics, Williams.

Samuel Alfred Mitchell, (F), A. M., Queen's Univ. (Ont.), 1894. — Research Fellow, Yerkes Observ., Univ. of Chicago.

Cleophas Cisney O'Harra, A. B., Carthage, 1891.—Prof. of Geology, etc., S. Dakota School of Mines.

Daniel Allen Penick, (F), A. B., Univ. of Texas, 1891.—Classical Instructor, Hackettstown, N. J.

Thomas Dobbin Penniman, A. B., 1892.—Balt.

Charles William Peppler, (F), A. B., 1892. —Prof. of Greek, Emory Coll., Ga.

Ebenezer Emmet Reid, (F), A. M., Richmond, 1892.—Prof. of Chemistry, etc., Charleston Coll., S. C

Edward Rhoads, S. B., Haverford, 1893.—Instructor in Physics, Worcester Polytech. Inst.

Garnett Ryland, A. M., Richmond, 1892.—Instructor in Chemistry, Univ. of Maine.

William Berney Saffold, (F), A. B., Univ. of Ala., 1887.—Prof. of Latin and Greek, Univ. of Ala.

Aristogeiton Marcus Soho.—Prof. of Greek, St. John's Coll., Md.

Charles William Waidner, A. B., 1896.—Assistant in Physics.

Richard Henry Wilson, A. B., 1892.—Instructor in Romance Lang.

Albert Francis Zahm, A. M., Notre Dame, 1885. — Instructor in Physics, Catholic Univ. (36)

1899.

James Rees Ewing, A. B., Ohio Wesleyan, 1890.

George Philip Krapp, A. B., Wittenberg, 1894.—Instructor in English, Teachers' Coll., Columbia Univ.

Walter Alexander Montgomery, A. B., 1892. —Raleigh, N. C.

Mervin Tubman Sudler, S. B., Md. Agricultural, 1894.—Graduate Student. (4)

(Degrees will also be conferred at the close of the academic year in June.) (476)

---

9. Doctors of Medicine.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a fellowship here.)

1897.

Charles Russell Bardeen, A. B., Harvard, 1893.—Assistant in Anatomy.

Thomas Richardson Brown, A. B., 1892.—Physician, Balt.

*Walter S. Davis, S. B., Amherst, 1893. **September* 27, 1898.

Louis Philip Hamburger, A. B., 1893.

Guy LeRoy Hunner, S. B., Univ. of Wis., 1893.—Asst. Gynecologist, J. H. Hospital.

Irving Phillips Lyon, A. B., Yale, 1893.—Instructor, Univ. of Buffalo, N. Y.

William George Mac Callum, A. B., Toronto, 1894.—Assistant in Pathology.

Charles Neil McBryde, S. B., Univ. of S. C., 1891, M. S., Va. Polytechnic, 1892.—Blacksburg, Va.

James Farnandis Mitchell, A. B., 1891.—Asst. Surgeon, J. H. Hospital.

Joseph Longworth Nichols, (F), A. B., Harvard, 1893.—Europe.

Eugene Lindsay Opie, (F), A. B., 1893.—Fellow in Pathology.

Mary Secord Packard, A. B., Vassar, 1892.—Physician, College Settlement, Pittsburgh, Pa.

Omar Borton Pancoast, S. B., Swarthmore, 1893.—Resident Physician, Union Protestant Infirmary, Balt.

Clement Andariese Penrose, A. B., 1893.—Physician, Balt.

Richard Pearson Strong, Ph. B., Yale, 1893. —Asst. Surgeon, U. S. Army. (15)

1898.

William Stevenson Baer, A. B., 1894.—House Officer, J. H. Hospital.

William Jephtha Calvert, A. B., Ky. Univ., 1893.—Asst. Surg., U. S. A., Ft. McHenry.

Patrick Joseph Cassidy, A. B., Yale, 1894.—Physician, Norwich, Conn.

John Williams Coe, Ph. B., Yale, 1893.—Resident Physician, Presbyterian Hospital, N. Y.

Percy Millard Dawson, (F), A. B., 1894.—Fellow in Physiology.

Arthur Wells Elting, A. B., Yale, 1894.—House Officer, J. H. Hospital.

William Weber Ford, A. B., Adelbert, 1893.—House Officer, J. H. Hospital.

Thomas Woods Hastings, A. B., 1894.—House Officer, J. H. Hospital.

Alfred Birch Herrick, A. B., Williams, 1894.—House Officer, J. H. Hospital,

James Hall Mason Knox, Jr., A. B., Yale, 1892, and Ph. D., 1894, A. M., Lafayette, 1896.—House Officer, J. H. Hospital.

Millard Langfeld, A. B., 1893.—Prof. of Bacteriology, Creighton Med. Coll., Omaha.

Gertrude Underhill Light, S. B., Univ. of Wis., 1894.—Asst. Resident Physician, Randall's Island Hospital, N. Y.

James Daniel Madison, S. B., Univ. of Wis., 1894.—House Officer, J. H Hospital.

Harry Taylor Marshall, A. B., 1894.—House Officer, J. H. Hospital.

Roger Griswold Perkins, A. B., Union, 1893, and Harvard, 1894.—Instructor, Western Reserve Univ.

Katherine Porter, A. B., Bryn Mawr, 1894.—Baltimore.

Joseph Hersey Pratt, Ph. B., Yale, 1894.—Asst. in Pathology, City Hospital, Boston.

Georgiana Sands, A.B., Vassar, 1893.—House Officer, J. H. Hospital.

Benjamin Robinson Schenck, A. B., Williams, 1894.—House Officer, J. H. Hospital.

Walter Ralph Steiner, A. B., Yale, 1892, and A. M., 1895.—House Officer, J. H. Hospital.

Emma Elizabeth Walker, A. B., Smith, 1887.—Clinical Asst., Hospital for the Ruptured and Crippled, and Physician, New York.

Andrew Henderson Whitridge, S. B., Harvard, 1894.—Baltimore. (22)

(37)

---

10. Bachelors of Arts.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a fellowship here.—*Died.)

1879.

George Washington McCreary, City Librarian, Balt., 1896-98.—Baltimore.

Chase Palmer, (F), Ph. D., 1882, Assistant, Mass. Inst. of Tech., 1882-83, Prof., Mass. Normal School, Salem, 1883-87, Assistant, Tufts Coll., 1887-88, Prof., Wabash Coll., 1888-90.—Prof. of Chemistry, Manual Training High School, Louisville, Ky.

Edward Henry Spieker, (F), Ph. D., 1882, Instructor and Associate, 1882-88.—Assoc. Prof. of Greek and Latin. (3)

1880.

Rev. Thomas Milton Beadenkopf, B. D., Yale, 1885.—Clergyman, Balt.

Allen Kerr Bond, M. D., Univ. of Md., 1882.—Physician, Balt.

William Cathcart Day, (F), Ph. D., 1883, Prof., St. John's Coll., 1883-84, and Univ. of Nashville, 1884-87.—Prof. of Chemistry, Swarthmore Coll.

Henry Laurence Gantt, M. E., Stevens Inst. of Tech., 1884, Instructor, McDonogh School, 1886-87.—Fitchburg, Mass.

Edgar Goodman, LL. B., Univ. of Md., 1881.—Editor, *The Baltimore American.*

Rev. Carl Eckhardt Grammer, Va. Theol. Sem., 1884, S. T. D., Trinity (Conn.), 1895, Prof., Va. Theol. Sem., 1887-97.—Clergyman, Norfolk, Va.

Alexander Fridge Jamieson.—Latin Master, Lawrenceville School, N. J.

*Edmund Allen Jarvis. **October* 15, 1880.

Stewart Brian Linthicum, LL. B., Univ. of Md., 1882.—Atty. at Law, Portland, Ore.

John Hanson Lowe, LL. B., Univ. of Md., 1882.—Atty. at Law, Balt.

Rev. Leigh Clinton Morgan, late Instructor, Kenyon Coll.—Clergyman, Morristown, N. Y.

*Nelson Palmer. **June* 12, 1886.

Thomas Pettigrew.—Civil Engineer, Parkersburg, W. Va.

Harry Fielding Reid, (F), Ph. D., 1885, Assistant, 1882-84, Lecturer, 1894-96, Prof., Case School, 1886-94, Assoc. Prof., Univ. of Chicago, 1895-97.—Assoc. Prof. of Geological Physics.

Rev. Wiltz Raymond Stricklen.—Clergyman, Washington, D. C.

Lewis Webb Wilhelm, (F), Ph. D., 1884.—Vice-Principal and Mathematical Master, Gymnasium School, Balt. (16)

1881.

William Wilson Baden, (F), Ph. D., 1892, LL. B., Univ. of Md., 1883, Prof. of Greek, Southwestern Univ., 1892-93, and Central Univ., 1893-96.—Fellow by Courtesy.

Henry Johns Bowdoin, LL. B., Univ. of Md., 1883.—Atty. at Law, Balt.

John Wilson Brown.—Philadelphia, Pa.

David Talbot Day, (F), Ph. D., 1884.—U. S. Geol. Survey, Washington.

William Henry Howell, (F), Ph. D., 1884, M. D., Univ of Mich., 1890, Assistant, Associate, and Assoc. Prof., 1884-89, Lecturer and Prof., Univ. of Mich., 1889-92, Assoc. Prof., Harvard, 1892-93.—Professor of Physiology.

John Hemsley Johnson, LL. B., Univ. of Md., 1887, Instructor, McDonogh School, 1881-86.—Atty. at Law, Balt.

James Edward Keeler, D. Sc., Univ. of Cal., 1893, Allegheny Observ., 1882-86, Fellow, Royal Astron. Society of London, Lick Observ., 1886-91, Rumford Medallist of the American Acad. of Arts and Sciences, 1898, Prof., Western Univ. of Pa., and Director, Allegheny Observatory, 1891-98.—Director, Lick Observatory.

Rev. Edwin George Richardson.—Clergyman, Milwaukee, Wis.

Adoniram Judson Robinson, LL. B., Univ. of Md., 1885, Instructor, Balt. City Coll., 1881-87.—Atty. at Law, Balt.

*Henry Rolando, M. D., Univ. of Md., 1883. **October* 4, 1888.

Lee Sale, LL. B., Washington Univ., 1885, Instructor, Louisville High School, 1881-83.—Atty. at Law, St. Louis, Mo.; Lecturer, St. Louis Law School.

Mactier Warfield, M. D., Univ. of Md., 1884.—Physician, Balt. (12)

1882.

William Hughlett Adkins, LL. B., Univ. of Md., 1883.—Atty. at Law, Easton, Md.

Thomas Alexis Berry.—Baltimore.

Gustav Bissing, (F), Ph. D., 1885, Examiner, U. S. Patent Office, 1884-98.—Patent Atty., Washington.

Walter Bernard Clarkson, Teacher, Member of Board of Education, and Supt. of Schools, St. Augustine and Jacksonville, 1878-89.—Atty. at Law, Jacksonville, Fla.

Hermann Louis Ebeling, (F), Ph. D., 1891. Prof. of Greek, Miami Univ.

Louis Garthe.—Journalist, Baltimore.

Edward Ingle.—Journalist, Baltimore.

Richard Fuller Kimball, LL. B., Univ. of Md., 1884.—Atty. at Law, Balt.

*Gustav Adolph Liebig, Jr., (F), Ph. D., 1885, Assistant, 1887-90. **February* 10, 1897.

Charles William Emil Miller, (F), Ph. D., 1886, Peoria (Ill.) High School, 1888-90, and Walther Coll., St. Louis, 1890-91.—Assoc. Prof. of Greek.

James Page, Allegheny Observatory, 1886-87.—U. S. Coast Survey, Washington.

Albert Gallatin Palmer, (F), Ph. D., 1885, Assistant and Asst. Prof., Swarthmore, 1885-87.—Norwood, Md.

Robert Miller Reese.—Baltimore.

Lewis Tebbetts Stevens, (F), M. D., Harvard, 1887, late Lecturer, Washington Univ. **February* 9, 1898.

Herbert Thorndyke Tiffany, LL. B., Univ. of Md., 1885.—Washington, D. C. (15)

1883.

William Shirley Bayley, (F), Ph. D., 1886.—U. S. Geological Survey; Prof. of Geology and Mineralogy, Colby Univ.

Maurice Fels, LL. B., Univ. of Pa., 1886.—Atty. at Law, Philadelphia.

David Sterrett Gittings.—Baltimore.

William Beatty Harlan, LL. B., Univ. of Md., 1885, A. M., St. John's, 1888.—Atty. at Law, Belair, Md.

George Theophilus Kemp, (F), Ph. D., 1886, M. D., Long Island Med. Coll., 1891, Demonstrator, Univ. of Pa., 1886-87, Associate and Assoc. Director, etc., Hoagland Lab., 1888-93.—Prof. of Physiology, Univ. of Illinois.

Gonzalez Lodge, (F), Ph. D., 1886, Prof., Davidson, 1886-88.—Prof. of Latin, Bryn Mawr.

William Edgar Stratton, M. D., Harvard, 1886.—Physician, Brooklyn, N. Y.

Henry Winslow Williams, LL. B., Univ. of Md., 1885.—Atty. at Law, Balt.

Henry Van Peters Wilson, (F), Ph. D., 1888, Bruce Fellow, 1888-89.—Prof. of Biology, Univ. of N. C.

William John Witzenbacher, Instructor, McDonogh School, 1883-86.—Atty. at Law, Hagerstown, Md. (10)

1884.

Rev. Albert Clayton Applegarth, Ph. D., 1887.—Clergyman, Chester, Pa.

Charles Walter Artz, LL. B., Columbia, 1886.—Atty. at Law, N. Y.

Walter Bliss Canfield.—Chemist, Pittsburg, Pa.

George Gibson Carey, LL. B., Univ. of Md., 1886.—Atty. at Law, Balt.

William Kennedy Cromwell.—Baltimore.

Charles William Remsberg Crum, M. D., Univ. of Md., 1888, Instructor, Mercersburg Coll., 1884–86, 1889–90, Prof. of Mathematics, Ursinus Coll., 1892–95.—Graduate Student.

Harry Friedenwald, M. D., Phys. and Surg., Balt.. 1886 —Physician, Balt.; Assoc. Prof., Coll. of Phys. and Surg.

Rev. William Lindsay Glenn, LL. B., Univ. of Md., 1888. —Clergyman, Balt.

John Hinkley, LL. B., Univ. of Md., 1886.—Atty. at Law, Balt.

Charles Morris Howard, LL. B., Univ. of Md., 1888.—Atty. at Law, Balt.

John Deering Lord, Jr., LL. B., Columbia, 1886.—Atty. at Law, Balt.

Jere Williams Lord, M. D., Univ. of Pa., 1887.—Clinical Prof. of Dermatology and Instructor in Anatomy.

William Patrick Lyons, LL. B., Univ. of Md., 1886.—Atty. at Law, Balt.

Edgar George Miller, Jr., LL. B., Univ. of Md., 1886.—Atty. at Law, Balt.

William Ridgely Orndorff, (F), Ph. D., 1887. —Asst. Prof. of Organic Chemistry, Cornell.

George Dobbin Penniman, LL. B , Univ. of Md., 1886.—Atty. at Law, Balt.

William Henry Perkins, Jr., LL. B., Univ. of Md., 1888.—Atty. at Law, Balt.

*George Clement Stokes, Jr., LL. B., Univ. of Md., 1888. **January* 21, 1897.

*William John Thomas, Prof. of Mathematics, Western Md. Coll., 1884–85. **March* 9, 1885.

*William Ferdinand Walz. **March* 21, 1887.

Frederick Henry Wilkens, Ph. D., Leipsic, 1891, Asst. Prof. of German, Univ. of Wis., 1893–96.—Fellow by Courtesy.

George Wishart Edmond, (*extra ordinem*), Assistant, 1889–90.—Garvanza, Cal.

Charles Howard Shinn, (*extra ordinem*).—Inspector of Agric. Experiment Stations, Univ. of Cal. (23)

1885.

John Pendleton Campbell, (F), Ph. D., 1888.—Prof. of Biology, Univ. of Ga.

John Glenn, Jr., LL. B., Univ. of Md., 1887. —Atty. at Law, Balt.

Rt. Rev. Junius Moore Horner, S. T. B., General Theol. Sem., N. Y., 1890, late Classical Instructor, Oxford, N. C.—P. E. Missionary Bishop of Asheville.

James Albert Loane.—Baltimore.

Harry Wilbur Price, LL. B., Columbian, 1887.—Atty. at Law, Chicago.

Benjamin Titus Roberts, Jr. — Morgan Park, Ill.

Moses Roth Ryttenberg, LL. B., Univ. of Md., 1888.—Atty. at Law, N. Y.

Hugo Steiner, LL. B., Univ. of Md., 1887.—Atty. at Law, Balt.

Henry Hazleburst Wiegand. — Electrical Engineer, Balt. (9)

1886.

Joseph Sweetman Ames, (F), Ph. D., 1890, Assistant, Associate, and Assoc. Prof., 1889–93.—Professor of Physics.

Wilson Lloyd Bevan, S. T. B., General Theol. Sem., N. Y., 1889, A. M. and Fellow of Columbia, 1889, Ph. D., Munich, 1893.—Instructor, Univ. of the South.

Thomas Hepburn Buckler, M. D., Univ. of Md., 1888.—Physician, Balt.

Alfred Robert Louis Dohme, Ph. D., 1889.—Manufacturing Chemist, Balt.

Albert Alvin Doub, Teacher, Frostburg, Md., 1886–93.—Atty. at Law, Cumberland.

William Snyder Eichelberger, (F), Ph. D., 1891, Instructor in Mathematics, etc., Wesleyan Univ., 1891–96.—U. S. Nautical Almanac, Washington.

Harry English.—Instructor, High School, Washington, D. C.

Abraham Flexner.—Classical Instructor, Louisville, Ky.

William Edward Gates.—Cleveland, O.

*William Curns Lawrence Gorton, (F), Ph. D., 1889, Assoc. Prof. and Prof. of Mathematics, Woman's Coll., Balt., 1888–94. **November* 8, 1894.

Joseph Edward Harry, (F), Ph. D., 1889.—Prof. of Greek and German, Georgetown Coll., Ky.

Benjamin Henry Hartogensis. — Editor, *The Jewish Exponent;* Atty. at Law, Balt.

James Shaler Hodges, Instructor, St. Paul's School, N. H., 1886–88.—Electrical Engineer, Balt.

Theodore Hough, (F), Ph. D., 1893, Instructor, McDonogh School, 1886–89.—Asst. Prof. of Biology, Mass. Inst. of Tech.

Percy Meredith Hughes.—Principal, Central High School, Washington, D. C.

John Henry Laessig, Jr.—Chemist, Balt.

Allan McLane, Jr., LL. B., Univ. of Md., 1888.—Atty. at Law, Balt.

John Hanson Thomas McPherson, (F), Ph. D., 1890, Instructor, Univ. of Mich., 1890–91.—Prof. of History, Univ. of Ga.

Colyer Meriwether, Ph. D., 1893, Instructor in Sendai, Japan, 1889-92.—Instructor, High School, Washington, D. C.

John Pleasants.—Baltimore.

Richard Hall Pleasants, Jr., LL. B., Univ. of Md., 1889.—Atty. at Law, Balt.

William Flood Smith, M. D., Phys. and Surg., Balt., 1889, Instructor, McDonogh School, 1886-87.—Physician, Balt.

Michael Daniel Stein.—Street Railway Supt., San Francisco.

Bernard Wiesenfeld, LL. B., Univ. of Md., 1889.—Atty. at Law, Balt.

John Whitridge Williams, M. D., Univ. of Md., 1888.—Assoc. Prof. of Obstetrics.

Langdon Williams.—Teacher, Philadelphia.

*William Klapp Williams, Ph. D., 1889.—**June* 4, 1897.

John Randolph Winslow, M. D., Univ. of Md., 1888.—Physician, Balt.

*Allan Chase Woods. **September* 9, 1886.

Frederick George Young, Vice-Pres., S. Dakota Normal School, 1888-91.—Prof. of Economics, etc., Univ. of Oregon.

*Thomas McCabe (*extra ordinem*), (F), Ph. D., 1888, Instructor, Univ. of Mich., 1888-89, Prof., Indiana Univ., 1889-90, Associate in French, Bryn Mawr, 1890-91. **February*, 22, 1891. (31)

1887.

Edward Carey Applegarth, (F), Ph. D., 1890, M. D., Phys. and Surg., Balt., 1892.—Physician, Balt.

Richard Howard Bayard, LL. B., Univ. of Md., 1889.—Atty. at Law, Balt.

Herbert Maxwell Brune, LL. B., Univ. of Md., 1889.—Atty. at Law, Balt.

Charles Edward Coates, Jr., Ph. D., 1891, Prof., St. John's Coll., 1891-93.—Prof. of Chemistry, La. State Univ.

Rev. William Roswell Cole, B. D., Harvard, 1890.—Clergyman, Cohasset, Mass.

Paul Joseph Dashiell, Ph. D., 1891, Instructor, Lehigh, 1889-90, 1891-92.—Prof. of Chemistry, U. S. Naval Acad.

George Peter Dreyer, (F), Ph. D., 1890, Demonstrator, 1890-92.—Associate in Biology.

Edward Duffy, Jr., LL. B., Univ. of Md., 1889.—Atty. at Law, Balt.

James Clark Fifield.—Atty. at Law, Minneapolis, Minn.

Julius Friedenwald, M. D., Phys. and Surg. (Balt.), 1890.—Physician, Balt.; Assoc. Prof. of Pathology, Coll. of Phys. and Surg.

Douglas Huntly Gordon, LL. B., Univ. of Md., 1889.—Pres., International Trust Co., Balt.

Jay Cæsar Guggenheimer, LL. B., Columbia, 1891.—Atty. at Law, N. Y.

Charles Homer Haskins, Ph. D., 1890, Instructor, 1889-90.—Prof. of Institutional History, Univ. of Wis.

George Lincoln Hendrickson, Prof., Colorado Coll., 1889-91, and Univ. of Wis., 1891-96.—Prof. of Latin, Univ. of Chicago.

Franz Otto Karl Hoffmann.—Berlin, Germany.

Robert Milligan McLane, Jr., LL. B., Univ. of Md., 1891.—Atty. at Law, Balt.

Robert William Rogers, Ph. D., Haverford, 1890, D. D., Wesleyan, 1894, Ph. D., Leipsic, 1895, Instructor, Haverford, 1887-90, Professor, Dickinson, 1890-93.—Prof. of Hebrew, Drew Theol. Sem.; Lecturer, Woman's Coll., Balt.

Henry Oliver Thompson, LL. B., Univ. of Md., 1890.—Atty. at Law, Balt.

Benjamin Simon William Tuska, A. M., Columbia, 1888, and LL. B., 1889.—Atty. at Law, N. Y.

Rev. Robert William Henry Weech.—Clergyman, Aberdeen, Md.

*Edward William Willis, M. D., Univ. of Md., 1889. **August* 7, 1893.

Henry Firey Wingert.—Atty. at Law, Hagerstown, Md.

Walter Bell Scaife (*extra ordinem*), Ph. D., Vienna, 1887.—Pittsburgh, Pa.

Albert Henry Smyth (*extra ordinem*).—Prof. of English, Central High School, Pa. (24)

1888.

Henry Harold Ballard, Ph. D., 1893, Instructor in Chemistry, Rose Polytech. Inst., 1893-96.—Science Master, Country School for Boys, Balt.

Edward Ambrose Bechtel, (F), Prof., Mt. Morris Coll., Ill., 1889-91, and Yankton Coll., 1891-92, Teacher, Dayton, O., 1892-93, Instructor, Northwestern Univ., 1893-97.—Fellow in Latin, Univ. of Chicago.

James William Black, Ph. D., 1891, Acting Prof., Georgetown Coll., Ky., 1891-92, Assoc. Prof., Oberlin, 1892-94.—Prof. of History, etc., Colby Univ.

Charles Pliny Brigham, Ph. D., 1891.—Greenport, Long Island.

*William Bromwell, Ph. D., 1895, Instructor in Chemistry, Pratt Inst., Brooklyn, 1896-98. **September* 30, 1898.

*Hamilton McFarland Brown. **May* 8, 1892.

Arthur Lee Browne. — Assoc. Prof. of Chemistry, Balt. Medical Coll.

Charles Hamilton Carey.—Baltimore.

John Broughton Daish, Instructor, Washington High School, 1888–89.—Washington.

Rev. William Levering Devries, (F), Ph. D., 1892, S. T. B., General Theol. Sem., N.Y., 1894.—Clergyman, Washington, D. C.

Gustav Edward Gieske, M. D., Phys. and Surg., Balt., 1891.—Catonsville, Md.

Raleigh Colston Gildersleeve.—Architect, N. Y.

Harris Hancock, Ph. D., Berlin, 1894.—Instructor, in Mathematics, Univ. of Chicago.

Walter Jones, Ph. D., 1891, Acting Prof., Wittenberg Coll., 1891–92, Instructor and Prof., Purdue Univ., 1892–95.—Assistant in Physiological Chemistry.

*William Augustine Jones, LL. B., Univ. of Ala., 1889. **February* 11, 1894.

Arthur Lincoln Lamb, Instructor, Tome Inst., 1896–97.—Science Teacher, Balt.

Charles Day Lanier.—Assistant Editor, *The Review of Reviews*, N. Y.

John Bright Macauley.—Washington, D. C.

*William Howard Miller, Instructor in Mathematics, Stanford Univ., 1891–93. **March* 2, 1893.

*George Neville Moore. **October* 29, 1889.

John Henry O'Donovan, M. D., Univ. of Md., 1891.—Baltimore.

Frank Eugene Reader.—Atty. at Law, New Brighton, Pa.

Louis Rettger.—Instructor, Terre Haute Normal School.

David Ellsworth Roberts.—Assistant, Art Dept., Library of Congress.

Lessing Rosenthal, LL. B., Northwestern Univ., 1891.—Atty. at Law, Chicago.

Charles Edmund Simon, M. D., Univ. of Md., 1890.—Physician, Balt.

Rev. Charles Kephart Swartz, Oberlin Theol. Sem., 1892.—Gettysburg, Pa.

Robert Melville Tarleton, E. M., Lehigh, 1895.—Mining Engineer, Omaha, Neb.

Edward Lucas White, Assistant, Dartmouth, 1891–92.—Baltimore.

John White, Jr., (F), Ph. D., 1891, Assistant, Cornell, 1891–93. — Instructor in Chemistry, Univ. of Neb.

Westel Woodbury Willoughby (F), Ph. D., 1891, Acting Asst. Prof., Stanford Univ., 1894–95.—Associate in Political Science.

William Franklin Willoughby, Statistical Expert, U. S. Dept. of Labor, Washington.

Charles Hiram Chapman, (*extra ordinem*), (F), Ph. D., 1890, Instructor and Associate, 1889–92.—President, Univ. of Oregon.

Charles Collier Holden, (*extra ordinem*).—Teacher, Elkton, Md. (34)

1889.

Adolph Bernhard, Ph. D., Chicago, 1894.—Assistant in Chemistry, Univ. of Chicago, 1893–98.

Hiram Horsburgh Bice, Prof., Austin Coll., 1890–92, and Blackburn Univ., 1892–93, Instructor, St. Joseph (Mo.) High School, 1893–96.—Classical Instructor, N. Y.

John Sedgewick Billings, M. D., Univ. of Pa., 1892.—Physician, N. Y.

Walton Bolgiano, M. D., Univ. of Pa., 1892.—Physician, Balt.

Theodore Cooke, Jr., M. D., Univ. of Md., 1891.—Physician, Balt.

Frank Barnum Culver.—Baltimore.

Richard Edward Edes, M. D., Harvard, 1895, Morgan Fellow, Harvard, 1890–91, Instructor, Mass. Inst. of Tech., 1892–93. —Physician, Dorchester, Mass.

Daniel Nathan Eisendrath, M. D., Chicago Med. Coll., 1891.—Physician, Chicago.

Albert Bernhardt Faust, (F), Ph. D., 1892, Instructor, 1894–96.—Assoc. Prof. of German, Wesleyan Univ.

Charles Lee Fulton, LL. B., Univ. of Md., 1892.—Atty. at Law, Balt.

Joseph Elliott Gilpin, Ph. D., 1892.—Associate in Chemistry.

Ross Granville Harrison, (F), Ph. D., 1894, Bruce Fellow, 1894, Lecturer, Bryn Mawr, 1894–95.—Associate in Anatomy.

George Newton Cressy Henschen, Instructor, Reading High School, 1889–94.—Reading, Pa.

William Sadler Hilles.—Baltimore.

William Isaac Hull, Ph. D., 1892.—Prof. of History, etc., Swarthmore Coll.

Harry Clary Jones, (F), Ph. D., 1892.—Associate in Physical Chemistry.

George Charles Keidel, (F), Ph. D., 1895.—Associate in Romance Lang.

Jesse William Lazear, M. D., Phys. and Surg. (N. Y.), 1892.—Assistant in Clinical Microscopy.

Alfred Mann, M. D., Phys. and Surg. (N. Y.), 1892.—Asst. in Pathology, Univ. of Denver; Physician, Denver, Colo.

Charles Carroll Marden, Ph. D., 1894, Instructor, Univ. of Mich., 1890–91, Instructor, 1894–97. — Associate in Romance Lang.

William Watson McCulloh, LL. B., Univ. of Md., 1892.

Philip Randle Moale, Ph. D., 1894.—Chemist, Asheville, N. C.

Waldo Newcomer.—Baltimore.

Leonard Magruder Passano.—Instructor in Mathematics, Mass. Inst. of Tech.

Arthur Jackson Patek, M. D., Univ. of Pa., 1892.—Physician, Milwaukee, Wis.

William Peters Reeves, Ph. D., 1893, Assistant, Union Coll., 1895-97.—Instructor in English, Iowa State Univ.

Legh Wilber Reid, M. S., Princeton, 1896.—Instructor in Mathematics, Princeton, 1893-97.—Student in Germany.

Ralph Robinson, LL. B., Univ. of Md., 1891.—Atty. at Law, Balt.

Brantz Mayer Roszel, (F), Ph. D., 1896.—Instructor in Physics, Washington High School.

Rev. John George Sadtler, B. D., General Theol. Sem., N. Y., 1893.—Clergyman, Balt.

Benjamin Bittinger Shreeves, LL. B., Univ. of Md., 1891.—Atty. at Law, Balt.

Robert Tunstall Taylor, M. D., Univ. of Va., 1891.—Physician, Balt.

Walter Herron Taylor, LL. B., Univ. of Va., 1891.—Atty. at Law, Norfolk, Va.

Winfield Scott Thomas, Professor, Chaffee Coll., 1889-90.—Classical Instructor, High School, Petaluma, Cal.

Harry Maas Ullmann, Ph. D., 1892, Honorary Fellow, Univ. of Chicago, 1892-93.—Instructor in Chemistry, Lehigh Univ.

Horatio Alanson Warren.—Teacher, Broad Brook, Conn. (36)

1890.

John McEwen Ames.—Detroit, Mich.

William Hand Browne, Jr., Instructor, Univ. of Neb., 1896-98.—Asst. Prof. of Electricity, Univ. of Ill.

James Edmund Bryan, Jr., Instructor, Mich. School of Mines, 1891-92, Principal, Houghton (Mich.) High School, 1892-93.—Supt. of Schools, Danville, Ill.

Rev. Ralph Erskine Carson, Allegheny Theol. Sem., 1895, Classical Instructor, Phila., 1890-92.—Asheville, N. C.

William Henry Carson, LL. B. and A. M., Harvard, 1894.—Atty. at Law, Camden, N. J.

Sydney Million Cone, M. D., Univ. of Pa., 1893.—Assistant in Surgical Pathology.

Vernon Cook, LL. B., Univ. of Md., 1892.—Atty. at Law, Balt.

Lucius Bradley Dorr, M. D., Univ. of Md., 1890.—Physician, Buffalo, N. Y.

Edwin Stanton Faust, Ph. D., Munich, 1893, Assistant, 1894-95.

Ned Arden Flood, A. M., Allegheny, 1898, Lecturer, Allegheny Coll., 1895-98.—Director, Chicago University Press.

Herbert Friedenwald. — Superintendent, Department of MSS., Library of Congress.

Fielding Hudson Garrison, M. D., Georgetown, 1893.—Physician, Washington.

Joseph Philip Gerry, Instructor, Washington High School, 1892-97.—Fellow and Instructor, Catholic Univ.

George William Gray, Ph. D., 1895.—Chemist, Staudard Oil Co., Whiting, Ind.

Samuel Harris Guggenheimer.—Atty. at Law, N. Y.

Daniel Dorsey Guy.—Asst. Editor, *The Sun*, Balt.

James Chew Johnston, M. D., New York Univ., 1892.—Physician, N. Y.

Edward Parkin Keech, Jr., LL. B., Univ. of Md., 1892.—Atty. at Law, Balt.

Henry McElderry Knower, (F), Ph. D., 1896, Bruce Fellow, 1895-96, Instructor in Biology, Williams, 1896-97.—Fellow by Courtesy.

Berwick Bruce Lanier, M. D., Univ. of Md., 1892.—Physician, Balt.

Sylvan Hayes Lauchheimer, LL. B., Univ. of Md., 1892.—Atty. at Law, Balt.

Tilghman Brice Marden, M. D., Univ. of Md., 1892.—Physician, Balt.; Lecturer in Histology, Balt. Med. Coll.

George Clarence Morrison, LL. B., Univ. of Md., 1893.—Atty. at Law, Balt.

Arthur Alexander Oehm.—Instructor in Music, Balt.

*Arthur Rosewald Oppenheimer, M. D., Univ. of Pa., 1893. **April* 29, 1895.

Rev. Lyman Pierson Powell.—Clergyman, Lansdowne, Pa.

Rev. Samuel Guy Snowden, B. D., Drew Theol. Sem., 1893.—Clergyman, Moscow, Pa.

James Ernest Stokes, M. D., Univ. of Md., 1892.—Resident Gynecologist, J. H. Hospital.

Isaac Lobe Straus, LL. B., Univ. of Md., 1892.—Atty. at Law, Balt.

Charles Snowden Watts, LL. B., Univ. of Md., 1893.—Atty. at Law, Balt.

William Wallace Whitelock, Ph.D ,Munich, 1892.—New York.

William Whitridge.—Baltimore.

Adolph Grant Wolf.—Atty. at Law, Washington.

Frank Alfred Wolff, Jr., (F), Ph. D., 1893.—Chemist, Agricultural Dept., Washington.

James Homer Wright, M. D., Univ. of Md., 1892, A. M., Harvard, 1894, Fellow, Univ. of Pa., 1892-93.—Instructor in Pathology, Harvard; Pathologist in Chief, Mass. General Hospital, Boston.

Rev. Oscar Woodward Zeigler, Princeton Theol. Sem., 1893, A. M., Princeton, 1894. —Clergyman, Moscow Mills, Md.

Inazo Nitobe (Ota), (*extra ordinem*), Ph. D., Halle, 1890.—Prof. of Economics, etc., Imperial Coll. of Agric., Sapporo, Japan. (37)

1891.

Michael Alexander Agelasto, A. M., Columbia, 1893.—Norfolk, Va.

*Delano Ames, M. D., Univ. of Md., 1892. **March* 10, 1899.

Thomas Stockham Baker, (F), Ph. D., 1895. —Associate in German.

Randolph Barton, Jr., LL. B., Univ. of Md., 1893.—Atty. at Law, Balt.

Daniel Base, Ph. D., 1895.—Assoc. Prof. of Chemistry, Md. Coll. of Pharmacy.

William Bissing, M. E., Ohio State Univ., 1893.—Asst. Examiner, U.S. Patent Office.

Rev. Frederick Foye Briggs, Crozer Theol. Sem., 1894.—Clergyman, Philadelphia.

Shellman Baer Brown.—Railroad Supt., Balt.

Thomas Morris Brown.—Cleveland, O.

Sidney Hand Browne.—Electrical Engineer, Balt.

Henry Andrews Bumstead, Ph. D., Yale, 1897.—Instructor in Physics, Yale.

Frank Kenneth Cameron, Ph. D., 1894, Fellow, Cornell, 1894-95, Asst. Prof., Catholic Univ., 1895-97.—Asst. in Physical Chemistry, Cornell.

Malcolm John Cameron, A. M., St. Francis Xavier (N. Y.), 1892, LL. B. and A. M., Columbia, 1894.—Atty. at Law, Balt.

George Carey.—Teacher, New York City.

Rev. Neilson Poe Carey, S. T. B., General Theol. Sem., N. Y., 1897.—Clergyman, N. Y.

Abraham Cohen, (F), Ph. D., 1894.—Associate in Mathematics.

Harry Webster Cooke.—Atty. at Law, Balt.

Arthur Aaron Dembitz.—New York.

Augustus Kounze Detwiler, M. D., Univ. of Pa., 1894.—Physician, Omaha, Neb.

George W. Dobbin, M. D., Univ. of Md., 1894.—Assistant in Obstetrics.

William Francis Gallaway, (F), Ph. D., 1896.—Classical Instructor, Savannah, Ga.

George Henry Heitmuller, M. D., Univ. of Pa., 1894.—Physician, Washington.

Jacob H. Hollander, (F), Ph. D., 1894, Sec., Special Monetary Commission of the U. S., 1897.—Associate in Economics.

Charles McHenry Howard, LL. B., Univ. of Md., 1893.—Atty. at Law, Balt.

Reid Hunt, (F), Ph. D., 1896, M. D., Coll. of Phys. and Surg. (Balt.), 1896, Tutor in Physiology, Columbia, 1896-98.—Associate in Pharmacology.

Charles William Leverett Johnson, (F), Ph. D., 1896.—Instructor in Greek, Yale.

Henry Webster Keating.—Classical Instructor, Duxbury, Mass.

*William Knower, LL. B., Univ. of Md., 1893. **December* 27, 1894.

George Lefevre, (F), Ph. D., 1896, Bruce Fellow, 1895-97, Assistant, 1897-98.—Science Master, Boys' High School, Atlanta.

George Milton Linthicum, M. D., Phys. and Surg. (Balt.), 1893.—Demonstrator, Woman's Med. Coll.; Physician, Balt.

Hugh Sisson Magruder, S. B., Columbia, 1898.—Architect, Balt.

Arthur William McDougall.—General Secretary, Associated Charities, Orange, N. J.

Rev. Whitford L. McDowell.—Clergyman, Balt.

James Farnandis Mitchell, M. D., 1897.—Asst. Surgeon, J. H. Hospital.

Archibald Campbell Murray.—Baltimore.

Charles Fairbank Painter, M. D., Harvard, 1895.—Physician, Boston; Asst. in Surgical Pathology, Harvard.

Alfred Wilmot Pleasants.—Baltimore.

Alfred Magill Randolph, Jr.—Westinghouse Co., Pittsburg.

William Ferdinand Rittler.

Charles James Search, M. D., Univ. of Wooster, 1892.—Physician, Brooklyn, N. Y.

Alfred Jenkins Shriver, LL. B., Univ. of Md., 1893, A. M., Loyola, 1894.—Atty. at Law, Balt.

Rev. James Lawrenson Smiley.—Clergyman, Chaptico, Md.

Samuel King Smith, LL. B., Univ. of Md., 1893.—Atty. at Law, Balt.

Rev. Daniel Gurden Stevens, Jr., (F), Ph. D., 1894, B. D., Crozer Theol. Sem., 1897.—Clergyman, Balt.

Charles Morton Stewart, Jr.—Baltimore.

William Stuart Symington, Jr., Ph. D., 1895, Asst. Prof., Stanford, 1894-95.—Prof. of Romance Lang., Amherst.

Matthew Möller Johnston Vea.—Stoughton, Wis.

Charles Joseph West.

Charles Francis Woods, Jr., Ph. D., 1897.—Prof. of Mod. Lang., Woman's Coll., Richmond.

Rev. Edward L. Watson.—Clergyman, Washington. (50)

1892.

Harry Adler, M. D., Univ. of Md., 1895.—Physician, Balt.

Newton Diehl Baker, Jr., LL. B., Washington and Lee, 1894.—Atty. at Law, Martinsburg, W. Va.

Charles Gambrill Baldwin, LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.

Edwin Bernhard Behrend, M. D., Georgetown, 1894.—Physician, Washington.

Rev. Lunsford Emory Bennett, B. D., Drew Theol. Sem., 1894.—Clergyman, Balt.

Arthur Fisher Bentley, (F), Ph. D., 1895, late Docent, Univ. of Chicago.—Journalist, Chicago.

George Edward Boynton.—Principal, Utica Academy, N. Y.

Thomas Richardson Brown, M. D., 1897.—Physician, Balt.

Alfred Cookman Bryan, Ph. D., 1896.—Instructor, Washington High School.

Charles Weathers Bump.—Night Editor, *The Sun*, Balt.

William Calvin Chesnut, LL. B., Univ. of Md., 1894.—Atty. at Law, Balt.

John Edwin Davis, LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.

Henry Haywood Glassie.—Atty. at Law, Washington.

Leon Emanuel Greenbaum, LL. B., Univ. of Md., 1895.—City Attorney, Balt.

James Wesley Harvey, Jr., LL. B., Univ. of Md., 1893.—Baltimore.

William August Haussmann, (F), Ph. D., 1895.—Instructor, High School, Allegheny, Pa.

Jose Lewis Hirsh, M. D., Univ. of Md., 1895.—Physician, Balt.; Demonstrator, Univ. of Md.

Morris James.—Classical Instructor, High School, Berkeley, Cal.

Hugh Judge Jewett, Jr., LL. B., Univ. of Md., 1894.—Atty. at Law, Balt.

Theodore Woolsey Johnson, M. E., Stevens Inst., 1896.—Consulting Mechanical Engineer, Phila.

John Holladay Latané, Ph. D., 1895.—Prof. of History and Economics, Randolph-Macon Woman's Coll., Va.; Lecturer in American Diplomatic History.

Edward Jaquelin L'Engle.—Atty. at Law, Jacksonville, Fla.

Earl Perkins Lothrop, M. D., Niagara Univ., 1894.—Physician, Buffalo, N. Y.

Charles Whitney Mixter, A. M., Harvard, 1893, Assistant in Economics, Harvard, 1896–98.

Walter Alexander Montgomery, Ph. D., 1899.—Raleigh, N. C.

James Flack Norris, (F), Ph. D., 1892.—Instructor in Chemistry, Mass. Inst. of Tech.

Thomas Dobbin Penniman, Ph. D., 1898.—Baltimore.

Charles William Peppler, (F), Ph. D., 1898.—Prof. of Greek, Emory Coll., Ga.

Albert Moore Reese.—Graduate Student.

William Miller Roberts, M. D., Univ. of Md., 1897.—Physician, Balt.; Asst., J. H. Dispensary.

Abram Barr Snively, M. D., Univ. of Pa., 1895.—Physician, Waynesboro, Pa.

John Sargent Stearns, M. D., Georgetown, 1894.—Physician, Washington.

Charles Daniel Steenken, M. D., Phys. and Surg. (N. Y.), 1896.—Physician, Balt.

Leopold Stern.—Electrical Engineer, Balt.

Lester Latham Stevens, LL. B., Univ. of Md., 1894.—Atty. at Law, Balt.

Gustav Lürman Stewart.—Baltimore.

John Stewart, Jr.—Baltimore.

Redmond Conyngham Stewart, LL. B., Univ. of Md., 1894.—Atty. at Law, Balt.

Arthur Bertram Turner.—Prof. of Mathematics, Temple Coll., Phila.

Harold John Turner.—Graduate Student.

Richard Henry Wilson, Jr., Ph. D., 1898.—Instructor in Romance Lang. (41)

1893.

John Robert Abercrombie, M. D., Univ. of Md., 1895.—Physician, Balt.

Adolph Hall Ahrens.—Baltimore.

Theodore George Ahrens.—Baltimore.

Delaware Clayton Andre, LL. B., Univ. of Md., 1894.—Atty. at Law, Balt.

Frank Andrews.—Teacher, Rockville, Md.

William Steenbergen Blackford.—Baltimore.

George Stewart Brown, LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.

William Lawrence Clark.—Baltimore.

Rev. Frank Angier Clarke, Professor, Keachie Coll., 1893–94.—Clergyman, Balt.

Edward Lowell Cox.—Chillicothe, O.

Noah Ernest Dorsey, (F), Ph. D., 1897.—Assistant in Physics.

Howard Blake Dowell, LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.
John Hooper Edmonson, LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.
Henry Simpson Greenleaf, M. D., Univ. of Pa., 1895.—Physician, Berkeley, Cal.
Wilmot Griffiss.—Baltimore.
Louis Philip Hamburger, M. D., 1897.—Student in Germany.
John Hampden Hazelton.—Atty. at Law, Washington.
Lloyd Lowndes Jackson, Jr., LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.
Millard Langfeld, M. D., 1898.—Prof. of Bacteriology, Creighton Med. Coll., Omaha.
John Leypold Griffith Lee, LL. B., Univ. of Md., 1894.—Atty. at Law, Balt.
Jacob Moses Moses, LL. B., Univ. of Md., 1895.—Atty. at Law, Balt.
Clayland Mullikin, LL. B., Univ. of Md., 1893.—Atty. at Law, Easton, Md.
Charles Watson Newhall.—Mathematical Master, Faribault, Minn.
Frederick Bogue Noyes.—Evanston, Ill.
Eugene Lindsay Opie, (F), M. D., 1897.—Fellow.
Charles Bingham Penrose, Jr., LL. B., Univ. of Md., 1898.—Atty. at Law, Balt.
Clement Andariese Penrose, M. D., 1897.—Physician, Balt.
Charles Carroll Schenck.—Graduate Student.
Siegmund Bacharach Sonneborn.—Baltimore.
Morris Ames Soper, LL. B., Univ. of Md., 1895.—Asst. State's Atty., Balt.
Francis Edgar Sparks, Ph. D., 1896.—Archivist, Md. Hist. Society.
Alfred Earnest Speirs, Instructor, Lehigh Univ. Prep. School, 1893-94.—Chicago, Ill.
Hugo Paul Thieme, Ph. D., 1897—Asst. Prof., Earlham Coll., 1897-98.—Instructor in French, Univ. of Mich.
Douglas Hamilton Thomas, Jr.—Architect, Boston, Mass.
Edwin Litchfield Turnbull.—Baltimore.
Rev. John Ogle Warfield, B. D., Episcopal Theol. Sem., Camb., 1896.—Clergyman, St. Michael's, Md.
Henry Skinner West, (F), Professor, Balt. City Coll., 1894-97.—Fellow.
Frederick Wallace Wilson.—Atty. at Law, The Dalles, Oregon.
Leo Wolfenstein.—Cleveland, O.
William Hamilton Kirk, (*extra ordinem*), (F), Ph. D., 1895.—Instructor in Latin, Vanderbilt. (40)

1894.

John Griffith Ames, Jr., Professor of English, Kenyon Coll., 1895-97.
William Stevenson Baer, M. D., 1898.—House Officer, J. H. Hospital.
Rev. Adolph Elhart Baker, Union Theol. Sem., Va., 1897.—Clergyman, Sykesville, Md.
Walter Baumgarten, M. D., Washington Univ., 1896, Asst. in Physiology, Harvard, 1897-98.
Arthur Henry Baxter, Ph. D., 1898.—Mod. Lang. Master, Country School for Boys, Balt.
Ernest Julius Becker, Ph. D., 1898.—Fellow by Courtesy.
Thomas Pumphrey Benson, M. D., Univ. of Md., 1898.
Thomas Fitz Patrick Cameron, Teacher, Funkstown, Md., 1896-97.—Baltimore.
Moses S. Cohen, LL. B., Univ. of Md., 1896.—Atty. at Law, Balt.
Bernard Milton Cone, A. M., Columbia, 1896, LL. B., 1897.—Atty. at Law, N. Y.
Charles Angelo Conrad, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Walter Cox, M. D., Balt. Univ., 1898.—Asst. Surg., U. S. Marine Hosp. Service.
Percy Millard Dawson, (F), M. D., 1898.—Fellow.
Eli Frank, LL. B., Univ. of Md., 1896.—Atty. at Law, Balt.
Nathaniel Edward Griffin.—Graduate Student.
Benjamin Howell Griswold, Jr., LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Richard Jordan Hancock, Jr.—Atty. at Law, Atlanta, Ga.
Stephen Cloud Harry.—Mathematical Instructor, Balt.
Thomas Wood Hastings, M. D., 1898.—House Officer, J. H. Hospital.
Rev. Conrad Augustine Hauser, Lancaster (Pa.) Theol. Sem., 1897.—Clergyman, Frostburg, Md.
Herman Frederick Krafft, LL. B., Columbia, 1898.—Classical Instructor, N. Y.
Harry Taylor Marshall, M. D., 1898.—House Officer, J. H. Hospital.
George Stevens Maynard.—General Electric Co., Schenectady, N. Y.
Louis Wardlaw Miles, M. D., Univ. of Md., 1897.—Graduate Student.
William Albert Nitze, (F).—Fellow by Courtesy.
James Piper, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.

John Eugene Howard Post.—Baltimore.
John Hurst Purnell.—Baltimore.
Milton Reizenstein, Ph. D., 1897.—Agent, Baron Hirsch Foundation, N. Y.
Frank Roy Rutter, (F), Ph. D., 1897.—U. S. Geological Survey.
Simon H. Stein, LL. B., Univ. of Md., 1896.—Atty. at Law, Balt.
Emerson H. Strickler.
Joseph Pembroke Thom, Jr.—Baltimore.
Rev. George Harvey Trull, B. D., Princeton Theol. Sem., 1897.—Clergyman, Wilmington, Del.
Clinton Gambrill Tudor.
Malcolm Van Vechten Tyson, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Horace Scudder Uhler, Instructor, Northwestern Univ., 1896-97.—Science Master, University School, Balt.
George Talbot Whitfield.—Atty. at Law, Balt.
Pere Lethrbury Wickes, Jr.—Atty. at Law, Balt.
*Chester Clark Wood. **September* 11, 1895.
James Curtis Ballagh, (*extra ordinem*), Ph. D., 1895.—Associate in History.

(41)

1895.

Wilbur Withrow Ballagh.—Tenafly, N. J.
William Sherman Bansemer, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Harry Bissing.—Electrician, New York.
Hanson Briscoe Black.—Atty. at Law, Charleston, W. Va.
Charles Henry Hardin Branch, B. D., Princeton Theol. Sem., 1898.
George Dobbin Brown.—Graduate Student.
Lawrason Brown.
Humphrey Warren Buckler.—Student of Medicine.
William Mack Chowning, S. B., Knox, 1894.—Student of Medicine.
Charles Bevan Clark, S. B., Mass. Inst. of Tech., 1897.—Asst. Engineer, Southern Railway, Washington, D. C.
Gilbert Abraham Coblens.—Baltimore.
Reuben Carll Foster, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Frank Taylor Fulton, S. B., Knox, 1894.—Student of Medicine.
James Daton Gallagher.—Student of Medicine.
George Herbert Gray.—Student of Architecture, N. Y.
Milton Daniel Greenbaum, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Roland Bridendall Harvey, LL. B., Univ. of Md., 1896.—New York City.
George Oscar James, (F), Instructor, Univ. of Utah, 1896-97.—Fellow.
Stuart Symington Janney.
Marcus Kaufman, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Charles Alexander Kilvert.—Boston, Mass.
Ernest Pendleton Magruder, Supt. of Schools, Williamsport, Md., 1896-97.—Upper Marlboro.
Edward Spiller Oliver.
John Donaldson Parker, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
David Sterrett Pindell.—Electrician, Balt.
Jacob Hall Pleasants, Jr.—Student of Medicine.
Rev. Gustav Rudolph Poetter, Lancaster (Pa.) Theol. Sem., 1898.—Clergyman, Martinsburg, W. Va.
John Andrew Robinson, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Sylvan Rosenheim.—Student of Medicine.
Charles Albert Savage.—Graduate Student.
Edgar Randolph Strobel.—Student of Medicine.
Robert McIlvaine Torrence.—Washington, Pa.
Campbell Easter Waters.—Graduate Student.
Arthur Charles Watkins.—Student of Divinity, Yale Univ.
Henry Abel Whitaker.—Atty. at Law, Belair, Md.
William Whitridge Williams.—Student of Medicine.
William Wingert, LL. B., Univ. of Md., 1897.—Atty. at Law, Hagerstown.

(37)

1896.

Thomas Sewell Adams, (F).—Fellow.
Cornelius Beatty.—Instructor, Des Moines Coll.
Augustus Caesar Binswanger.—Baltimore.
Charles Edward Caspari.—Graduate Student.
Clarence Carroll Clark.—Instructor in Modern Lang., Toledo, O.
Frank Wilbur Collier.—Student of Theology, Boston Univ.
Charles Edward Diehl.—Teacher, Charlestown, W. Va.
William Reginald Dorsey.—Student of Law, Univ. of Md.
George Dyre Eldridge, Jr.—Student of Law, Columbia.
Albert Dale Gants.—Student, Princeton Theol. Sem.
Alfred Dearing Harden.—Student, New York Law School.

William Faithful Hendrickson.—Student of Medicine.
*Frank Holmes Johnson. **June* 20, 1896.
Charles Harwood Knight.—Cleveland, O.
William Kurrelmeyer, (F).—Fellow.
Robert Lacy, S. B., Mass. Inst. of Tech., 1898.—Civil Engineer, Balt.
Henry Lanahan.—Prof of Physics, Md. Agric. Coll.
Monroe Luchs.—Washington, D. C.
Arthur Webster Machen, Jr.—Student of Law, Harvard.
Richard Elliott Marine.—Instructor, Michigan City (Ind.) High School.
Henry Pickering Parker.—Student of Medicine.
Albert Cabell Ritchie, LL. B., Univ. of Md., 1898.—Atty. at Law, Balt.
Louis Rosenbaum, LL. B., Univ. of Md., 1898.—Atty. at Law, Balt.
Glanville Yeisley Rusk.—Student of Medicine.
Laurence Frederick Schmeckebier, (F).—Fellow.
James Eustace Shaw.—University Scholar.
St. George Leakin Sioussat.—University Scholar.
Alexander Raymond Stevens.
Rev. John Wesley Richardson Sumwalt.—Clergyman, Balt.; Graduate Student.
John Hanson Thomas, LL. B., Univ. of Md., 1897.—Atty. at Law, Balt.
Charles Burnet Torsch.—Baltimore.
James McConky Trippe, LL. B., Univ. of Md., 1898.—Atty. at Law, Balt.
Charles William Waidner, (F), Ph. D., 1898.—Assistant in Physics.
William Fisher Wallis.—Graduate Student.
Frederick Howard Warfield.—Teacher, Balt.
John Armistead Welbourn.—Student, Va. Theol. Sem.
John Montgomery West.—Student of Medicine. (37)

1897.

Herbert Henry Adams.—Student, Mass. Inst. of Technology.
Frederick Henry Baetjer.—Student of Medicine.
Frank Ringgold Blake, (F).—Fellow.
Edward Lingan Bowlus.—Middletown, Md.
Charles Keyser Edmunds.—Acting Prof. of Physics, Univ. of Utah.
Howard Main Gassman.—Instructor in Mathematics and Physics, Ursinus Coll.
Neil Duncan Graham.—Student of Medicine.
Charles Saloman Guggenheimer.—Student, New York Law School.
Frank Arnold Hancock.—Graduate Student.
Landry Harwood.—Student of Law, Univ. of Md.
Eugene de Forest Heald, Jr.
Michael Ernest Jenkins.—Student of Law Harvard.
Harry M. Kaufman.—Student of Medicine.
Rev. Frank Albert Killmon.—Clergyman, Balt.
John Edgar Knipp.—Student of Theology, Dayton, O.
Theodore Morgan Leary.—Baltimore.
William Strobel Levy.—Student of Law, Univ. of Md.
Warfield Theobald Longcope.—Student of Medicine.
Charles Edward Lyon.—Graduate Student.
Henry Clay McComas, Jr., A. M., Columbia, 1898.—Student, Union Theol. Sem., N. Y.
George Lovic Pierce Radcliffe.—University Scholar.
Herbert Meredith Reese.—Univ. Scholar.
Alexander Henry Schulz, Jr.—Teacher, Balt.
John Frederick Schunck.—Student of Divinity, Philadelphia.
*Henry Plant Shuter. **October* 17, 1898.
Josiah Morris Slemons.—Student of Medicine.
Samuel Hamilton Spragins.
Albert Steinfeld.—Student of Medicine.
James McIlhany Thomson.—Washington, D. C.
Albert James Underhill.—Student of Medicine.
Louis Marshall Warfield.—Student of Medicine.
George William Warren.—Student of Medicine.
David Emrich Weglein.—Teacher, Balt.
Dudley Williams.—Student of Medicine.
Henry Merryman Wilson.—Concord, N. C.
Charles Knickerbacker Winne, Jr.—Student of Medicine. (36)

1898.

Zadok Marshall Ballard.—Graduate Student.
Robert Ernest Belknap.—Yonkers, N. Y.
Odin Baltimore Bestor.—Baltimore.
Duncan Kenner Brent.—Student of Law, Univ. of Md.
Bennet Bernard Browne, Jr.—Student of Medicine.

George Miltenberger Clarke.—University Scholar.
Henry Wireman Cook.—Student of Medicine.
Albert Charles Dieffenbach.—Student of Theology and Teacher, Lancaster, Pa.
Gustavus Charles Dohme.—Univ. Scholar; Student of Medicine.
Ralph Duffy.—Student of Medicine.
James F. Ferguson.—Graduate Student.
John Somerville Fischer.—Graduate Student.
Thomas Fitzgerald, Jr.—Graduate Student.
Lawrence Hall Fowler.
William Willoughby Francis.—Student of Medicine.
William Cazenove Gardner.—Passaic, N. J.
Alexander Gordon, Jr.—Student of Law, Univ. of Md.
William Browne Hammond, Jr.—Student of Law, Univ. of Md.
Philip Warner Harry.—Pylesville, Md.
Leonard Keene Hirshberg.—Student of Medicine.
Conway Shaler Hodges.—Baltimore.
William Randle Hubner.—Student of Law, Univ. of Md.
Robert Henry Jones.—Student of Law, Univ. of Md.
Charles Wesley Kalb.—Baltimore.
James Alfred Kennard.—Student of Law, Univ. of Md.
Louis Charles Lehr.—Student of Medicine.
Henry John Lucke.—University Scholar.
David Gregg McIntosh, Jr.—Student of Law, Univ. of Md.
Frank Oldham Miller.—Student of Medicine, Univ. of Md.
Raymond Durbin Miller.—University Scholar.
Solomon Brenner Meyers.—Student of Law, Univ. of Md.
Harold Pender.—University Scholar.
Thomas Lindley Pyle.—University Scholar.
Vincent Adams Renouf.—University Scholar.
George Barr Scholl.—Student of Medicine.
Alexander Lazear Seth.—Graduate Student.
Frederick Williamson Smith.—Student, Mass. Inst. of Tech.
Robert Marsden Smith.
Victor Edgeworth Smith.—Graduate Student.
Charles Miner Stearns.—Student, Hartford Theol. Sem.
Leo D. Stein.—Graduate Student.
William Plunket Stewart.—Baltimore.
Albert Gad Stidman.—University Scholar.
William Ellinger Straus.—Baltimore.
Joseph Nathan Ulman.—Student of Law, Columbia Univ.
John Boswell Whitehead.—Instructor in Electricity.
Powhatan Johnson Wooldridge.—Louisville, Ky.
Jacob Forney Young.—Graduate Student.
Rev. Charles Smith Lewis (*extra ordinem*), S. T. B., Gen. Theol. Sem. (N. Y.), 1895.—Fellow, Gen. Theol. Sem. (49)

(581)

---

11. Proficients in Applied Electricity.

(When the institution is not named, this university is to be understood. (F) indicates that the person has held a Fellowship here. *—Died.)

1889.

Cary Talcott Hutchinson, (F), Ph. B., Washington Univ., 1886, Ph. D., 1889.—Consulting Engineer, N. Y.; Acting Assoc. Prof. of Electricity.
Joseph Lee Jayne, U.S. Naval Acad., 1882.—Lieutenant, U. S. Navy; Bureau of Electricity, Navy Dept., Washington.
Henry Hazlehurst Wiegand, A. B., 1885.—Electrical Engineer, Balt.
Gilbert Wilkes, U. S. Naval Acad., 1881, Lecturer, Univ. of Wis., 1892–94.—Consulting Electrical Engineer, Detroit. (4)

1890.

William Julian Albert Bliss, A. B., Harvard, 1888, Assistant, 1890–91, 1895–97, Ph. D., 1894, Lecturer, 1894–95, Instructor, Woman's Coll., Balt., 1894–95.—Associate in Physics.
James Shaler Hodges, A. B., 1886.—Electrical Engineer, Balt. (2)

1892.

*Ezra Carl Breithaupt. **January* 27, 1897.
William Hand Browne, Jr., A. B., 1890, Instructor, Univ. of Neb., 1896–98.—Asst. Prof. of Electricity, Univ. of Ill.

*Henry Wakefield Frye, A. B., Colby, 1889. **June* 20, 1895.
George Henry Hutton, Jr.—Baltimore.
Robert Ernest Hutton.—Electrician, Lexington, Va.
Norman Crawford McPherson, A. B., Pa. Coll., 1889.—Hagerstown, Md.
Hugh Pattison.—Sprague Electric Co., N.Y.
Charles William Waidner, (F), A. B., 1896, Ph. D., 1898.—Assistant in Physics.
Arthur Judson Warner, A. B., Marietta, 1889. (9)

1893.

Louis Minturn Aspinwall.—Westinghouse Electric Co., Pittsburg.
Shellman Baer Brown, A. B., 1891.—Railroad Supt., Annapolis, Md.
Sidney Hand Browne, A. B., 1891.—Electrical Engineer, Balt.
Eugene Russell Carichoff, A. M., Washington and Lee, 1885.—Sprague Electric Co., N. Y.
Howard Waters Doughty.—Baltimore.
Harold Mills Dyar, Ph. B., Marietta, 1888.—Electrical Engineer, Marietta, O.
Irenus Kittredge Hamilton, S. B., Trinity (Conn.), 1891.—Chicago, Ill.
William Winter Handy, S. B., Haverford, 1891.—Electrical Engineer, Balt.
Charles Roy McKay.—Sprague Electric Co., New York.
William Robinson Molinard.—Electrical Engineer, Balt.
*Arthur Lacy Reese. **March* 12, 1894.
Arthur John Rowland.—Professor of Electrical Engineering, Drexel Inst.
William Frederick Schulz.—Electrician, Balt.
Robert Isaac Todd.—Railroad Supt., Washington, D. C.
John Boswell Whitehead, Jr., A. B., 1898.—Instructor in Electricity. (15)

1894.

William Pierce Anderson, A. B., Harvard, 1892.
John Woodside Corning.—Electrician, Boston, Mass.
Lewis Warrington Cottman.—Electrician, Balt.
Harvey Cavendish Darrell.—Electrician, Balt.
Peter Conover Hains, Jr., U. S. Naval Acad., 1893.—Civil Engineer, Balt.
Stephen Quentin Hayes, A. B., Georgetown (D. C.), 1892.—Westinghouse Electric Co., Pittsburg.
Douglas Alexander Howard, U. S. Mil. Acad., 1878.—Captain (retired), U. S. A.
Andrew Ellicott Maccoun.—Electrician, Carnegie Steel Co., Pittsburg.
James Warren McCrosky, S. B., Univ. of Neb., 1891.—Electrician, Buenos Ayres, S. A.
Henry Hutchinson Norris.—Instructor in Electricity, Cornell Univ.
Charles Edward Phelps, Jr.—Chief Engineer, Electrical Subway Commission, Balt.
Alfred Magill Randolph, Jr., A. B., 1891.—Westinghouse Electric Co., Pittsburg.
Samuel Reber, U. S. Mil. Acad., 1886, First Lieut., U. S. A.—Instructor, Signal Service, U. S. Army.
Franklin Roberts.—Electrician, Balt.
Theodore Straus.—Electrician, Balt.
John Saunders Taylor.—Atty. at Law, Norfolk, Va.
Frank McStocker Thomas.—Electrician, Philadelphia.
Wallace Durant White.—Electrical Engineer, N. Y.
James Watts Young.—Electrician, N. Y. (19)

1895.

Harry Bissing, A. B., 1895.—Electrician, N. Y.
Byron Briggs Brackett, A. B., Syracuse, 1890, Ph. D., 1897, Instructor, Union Coll., 1897-98.—Acting Instructor in Physics, High School, Wash., D. C.
Benjamin Harrison Branch.—General Electric Co., Schenectady.
Edson Fessenden Gallaudet, A. B., Yale, 1893, Ph. D., 1896.—Instructor in Physics, Yale.
George Henry Hill, A. B., Williamsport Dickinson Sem., 1891.—Sprague Electric Co., N. Y.
Alexander McIlver, Jr., A.B., Univ. of N.C., 1890.—Sprague Electric Co., N. Y.
Joseph Mullen, Jr.
Charles Reutlinger.—Electrician, Balt.
John Jacob Rothermel, A. B., Franklin and Marshall, 1893.—Electrician, Trenton, N. J.
Frank Semple Wilcox, S. C. Mil. Acad., 1893. (10)

1896.

Matthew Maury Corbin.—Electrical Engineer, Alexandria, Va.
Isidor Deutsch.—Electrician, Balt.
Hugh Miller Frazer, S. B., Ky. State, 1889.—Electrician, Lexington, Ky.

James Holdsworth Gordon, Jr.—Electrician, N. Y.
Horace Marshall Harriman, Jr.—Electrician, Balt.
Malcolm Westcott Hill.—Electrician, Balt.
George Harwood Hodges.—Electrician, N.Y.
Jasper Alan McCaskell, S. B., Loyola, 1895.—Student, Columbia Univ. (School of Mines).
George Stevens Maynard, A. B., 1894.—General Electric Co., Schenectady.
Henry Todd Powell.—Electrician, Balt.
Charles Leonard Reeder.—Electrician, Balt.
Martin Schwab.—Electrician, Balt.
James Mowton Saunders Waring.—Electrician, Balt. (13)

1897.

Wyatt Hamilton Allen, Ph. B., Yale, 1896.—Electrician, N. Y.
Joseph Hockman Bowman, A. B., Franklin and Marshall, 1893, Instr. in Physics, Trinidad, Colo., 1897-98.—Electrical Engineer.
Walter Herman Eisenbrandt.—Electrician, Balt.
David Sterrett Pindell, A. B., 1895.—Electrician, Balt. (4)

1898.

George Edward Bartell.—Baltimore.
William Burke Brady, M. E., Lehigh, 1897.
Edmund Frank, S. B., Rose Polytechnic, 1897.
William Schrofield Gorsuch, Jr.—Electrician, Balt.
Richard Cameron Haldeman, A. B., Yale, 1896.
William Lemmon Hodges.—Electrician, N. Y.
Ferdinand Brauns Keidel.—General Electric Co., Schenectady.
Bertram Motter Kershner.
Charles J. Spencer.—Electrician, Edison Co., Philadelphia. (9)
(85)

12. Libraries.

1. The University Library numbers 89,000 bound volumes, selected with special reference to the instruction here given. It is arranged in several collections, of which these are the chief:

General Reference.	Oriental Languages.
Historical and Political.	Romance and Teutonic Languages.
Mathematical and Physical.	The McCoy Art Library.
Chemical.	Library of Southern History.
Biological.	Clinical Medicine.
Classical.	Physiology and Anatomy.

The reference library and reading room is open daily from 9 a. m. to 6 p. m.; the other rooms in accordance with special regulations.

The Library receives the publications of the leading scientific societies of the world and the chief literary and scientific periodicals. The whole number of serials received exceeds one thousand. This list is supplemented by those of the Peabody Institute and other institutions, so that the whole number of journals accessible (exclusive of ephemeral publications) exceeds twelve hundred. Important books are received by the library as soon as published, by purchase or by the courtesy of dealers.

2. The Peabody Library is a choice collection of books purchased since 1866. It is particularly full in academic transactions, long historical series, and costly illustrated books. It numbers 133,000 volumes, well bound, catalogued, and arranged. It is open daily, without charge, from 9 a. m. to 10.30 p. m.

3. The Enoch Pratt Free Library numbers over 190,000 volumes, and is open daily, without charge.

4. The Maryland Historical Society Library contains 30,000 volumes of historical works, and is open daily.

5. Other libraries of Baltimore are the New Mercantile Library (65,000 volumes), the Bar Library (16,000 volumes), the Medical and Chirurgical Library (12,000 volumes), the Maryland Episcopal Library (25,000 volumes), and the Library of the Maryland Institute (23,000 volumes).

6. Washington is so near that its museums and libraries may be easily visited. Among the chief institutions of interest to students are these:

The Smithsonian Institution and National Museum.
The Library of Congress.
The Army Medical and Surgical Museum and Library.
The U. S. Coast and Geodetic Survey.
The U. S. Geological Survey.
The U. S. Naval Observatory.
The Libraries of the Departments and Bureaus.
The Corcoran Art Gallery.

13. Regulations of the Treasurer's Office.

I. The Treasurer's Office is open daily from 9 a. m. to 4.15 p. m.

II. All bills should be presented at that place, endorsed as correct by the person under whose authority the expense has been incurred.

III. No member of the Academic Staff is allowed to incur a bill in the name of the University, unless authority is given for the same by the Trustees, in advance—either as an item in the annual budget, or as a special appropriation. Blank forms of application are provided for special requisitions.

IV. Orders for books and apparatus to be imported from Europe will not be considered authorized unless countersigned by the President or the Treasurer of the University.

All goods must be consigned to and addressed "Johns Hopkins University, Baltimore, Md." Goods for other parties (societies or individuals) must not be included in the University cases. Invoices, sworn to before the U. S. Consul, must be sent by mail, and a duplicate invoice by the following mail, both addressed to the Johns Hopkins University.

Unless otherwise ordered, goods from Europe should be sent as follows:

From Germany by the North German Lloyd steamers sailing for Baltimore from Bremen; from England by steamship lines from Liverpool to Baltimore; from France and Italy, via Havre and Liverpool.

Printed copies of instructions to shippers, which can be obtained at the Treasurer's Office, should in all cases be enclosed with the orders.

V. The Treasurer's Office will make purchases, at wholesale rates, of supplies which are required for the current needs of the University.

VI. Such pass-books as are authorized by the Treasurer should be presented for balance and settlement every month.

VII. The wages of all persons employed by the University will be paid at the Treasurer's Office.

VIII. When C. O. D. packages are expected, previous arrangements should be made for their reception.

IX. Outlays made for individuals (express parcels, postage, telegraph messages, etc.) should be settled at once.

X. An annual allowance is made by the Trustees, in the budget, for such expenses as they approve, and in deciding on the items they are governed by a consideration of the general interests of the University, as well as by the needs of special branches of instructions. Balances to the debit or credit of any account are carried forward to the new account, at the opening of each financial year (September 1). A statement of the amount of the balance and of any additional appropriation will be communicated to the parties severally interested, if requested, after the Trustees' meeting in October.

FRANCIS WHITE,
Treasurer.

14. Publications issued at the Johns Hopkins University.

I. American Journal of Mathematics.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. Professor Simon Newcomb is now the Editor. Twenty volumes of about 400 pages each have been issued, and the twenty-first is in progress. It appears quarterly. Subscription $5 per year. Single numbers $1.50. The set of twenty volumes will be sold for one hundred dollars.

II. American Chemical Journal.

This journal was commenced in 1879, with Professor Remsen as Editor. Twenty volumes of about 450 pages each have been issued, and the twenty-first is in progress. Beginning with 1899, this journal will appear monthly. Two volumes of six numbers and of about 500 pages each will be issued yearly. Subscription $5 per year. Single numbers 50 cents.

III. American Journal of Philology.

The publication of this journal commenced in 1880, under the editorial direction of Professor Gildersleeve. Nineteen volumes of about 570 pages each have been issued, and the twentieth is in progress. It appears four times yearly. Subscription $3 per volume. Single numbers $1. The set of twenty volumes will be sold for sixty dollars.

IV. Studies from the Biological Laboratory.

The publication of these papers commenced in 1879, under the direction of Professor Martin, with the assistance of Professor W. K. Brooks. Four volumes of about 500 pages, octavo, and 40 plates each, have been issued.

V. Studies in Historical and Political Science.

The publication of these papers was begun in 1882, under the editorial direction of Professor H. B. Adams. Sixteen series are now completed and the seventeenth series is in progress. Twenty extra volumes have also been issued. Subscription $3 per volume. The set of sixteen regular series will be sold for forty-eight dollars.

VI. Memoirs from the Biological Laboratory.

These monographs are issued under the editorial direction of Professor W. K. Brooks. Volume IV is in progress. Price for the set of four volumes thirty dollars.

VII. Johns Hopkins University Circulars.

The publication of these Circulars began in December, 1879, and 140 numbers have since been issued. Subscription $1.00 per year.

VIII. Contributions to Assyriology and Comparative Semitic Philology.

The publication of this journal was begun in 1889. Professor Paul Haupt, of the Johns Hopkins University, and Professor Friedrich Delitzsch, of the University of Breslau, are the editors. Volume IV is in progress. The set of three volumes will be sold for $22.50.

IX. The Johns Hopkins Hospital Reports.

These reports are edited by the Faculty of the Johns Hopkins Medical School and published for the Johns Hopkins Hospital. Their publication was begun in 1890. Volume VII is in progress. Price $5 per volume. The set of seven volumes will be sold for thirty-five dollars.

X. The Johns Hopkins Hospital Bulletin.

The publication of these Bulletins began in 1889. They are published monthly. Volume X is in progress. Subscription $1.00 per year. The set of ten volumes will be sold for twenty dollars.

XI. Modern Language Notes.

This journal is edited by Professor A. M. Elliott and his associates in the Modern Language Department. It appears monthly. The fourteenth volume is in progress. Price $1.50 per year.

XII. The Journal of Experimental Medicine.

The publication of this journal was begun in 1896. Professor W. H. Welch is the principal editor. It appears six times yearly. Volume IV is in progress. Price $5 per year. The set of four volumes will be sold for twenty-five dollars.

XIII. Reports of the Maryland Geological Survey.

These reports are under the editorial direction of Professor W. B. Clark, Director of the Survey.

XIV. Annual Report,

Presented by the President to the Board of Trustees, reviewing the operations of the University during the past academic year.

XV. Annual Register,

Giving the list of the officers and students and containing detailed statements as to the regulations and work of the University.

Announcements of the Graduate, Collegiate, and Medical Courses of Instruction are issued yearly and will be sent on application.

Some of the principal separate publications issued by the Johns Hopkins Press are:—

PHOTOGRAPHS OF THE NORMAL SOLAR SPECTRUM. By Professor H. A. Rowland. Set of ten plates, $20.

These consist of ten plates, each 3x2 feet, containing two strips of the spectrum; and extending from wave-length 3000 to wave-length 6950. Concave gratings having 10,000 to 20,000 lines to the inch, made in the physical laboratory of the University, were used in making these photographs.

A NEW CRITICAL EDITION OF THE HEBREW TEXT OF THE OLD TESTAMENT. Now in progress. Prospectus on application.

A COMPLETE FACSIMILE EDITION OF THE TEACHING OF THE APOSTLES. 110 pages quarto and 10 plates. $5.00.

STUDIES IN LOGIC. 210 pages, 12mo. $2.00.

REPRODUCTION OF A SYRIAC MANUSCRIPT OF THE ANTILEGOMENA EPISTLES. 17 phototype pages. $3.00.

EMBRYOLOGY OF INSECTS AND ARACHNIDS. By Adam T. Bruce. 50 pages, 4to, and 7 plates. $3.00.

TOPOGRAPHICAL AND GEOLOGICAL MAPS OF THE VICINITY OF BALTIMORE. $1.00 each.

THE CONSTITUTION OF THE EMPIRE OF JAPAN. 50 cents.

DESCRIPTION OF THE JOHNS HOPKINS HOSPITAL. 116 pages, 4to, and 56 plates. $7.50.

SELECTIONS FROM THE EARLY SCOTTISH POETS. By William Hand Browne. $1.25.

A MONOGRAPH ON THE GENUS SALPA. By W. K. Brooks. 400 pages and 57 plates. $7.50.

THE FINANCIAL HISTORY OF BALTIMORE. By J. H. Hollander. 400 pages, 8vo. $2.00.

STUDIES IN TYPHOID FEVER. By William Osler and others. 481 pages, 8vo. $3.00.

THE MALARIAL FEVERS OF BALTIMORE. By W. S. Thayer and others. 280 pages, 8vo. $2.75.

STUDIES IN STATE TAXATION WITH PARTICULAR REFERENCE TO THE SOUTHERN STATES. (In press.)

HISTORY OF COÖPERATION IN THE UNITED STATES. Edited by R. T. Ely. 540 pages, 8vo. $3.50.

BIBLIOGRAPHIA HOPKINSIENSIS. A list of publications by members of the University. Now in progress.

DISSERTATIONS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE JOHNS HOPKINS UNIVERSITY.

15. Scientific Societies.

1. The Scientific Association, meeting under the presidency of Professor Remsen.

2. The Philological Association, meeting under the presidency of Professor Gildersleeve.

3. The Historical and Political Science Association, of which Professor Adams is the director.

4. A Naturalists' Field Club, which makes weekly excursions during the spring and autumn and holds monthly meetings for the presentation and discussion of papers.

There are also companies which meet weekly in the laboratories for the reading of the scientific journals, and seminaries in several departments of study.

---

16. Historical Statement.

The Johns Hopkins University was founded by the munificence of a citizen of Baltimore, Johns Hopkins, who bequeathed the most of his large estate for the establishment of a University and a Hospital.

1867, August 24.	Incorporation of the Johns Hopkins University.
1870, June 13.	Organization of the Board of Trustees.
1873, December 24.	Death of the Founder [born May 19, 1795].
1874, February 6.	First Business Meeting of the Trustees.
1874, December 30.	Election of a President of the University.
1876, February 22.	Inauguration of the President.
1876, October 3.	Instruction of Students began.
1886, April 26.	Celebration of the Tenth Anniversary.
1889, May 7.	Opening of the Johns Hopkins Hospital.
1893, October 1.	Opening of the Johns Hopkins Medical School.

CALENDAR, 1899-1900.

The University Examination of Undergraduates begins Thursday, June 1, 1899.

Commencement Day falls on the second Tuesday in June: in 1899 on June 13; in 1900 on June 12.

The first Examinations for Admission and Matriculation begin Wednesday, June 14, 1899, at 9 a. m.

The second Examinations begin Wednesday, September 27, 1899, at 9 a. m.

The instruction of classes in all departments (graduate, undergraduate, and medical) begins on the first Tuesday in October: in 1899 on October 3.

The Christmas Recess begins Friday evening, December 22, 1899. Exercises will be resumed Tuesday morning, January 2, 1900.

Commemoration Day falls on Thursday, February 22, 1900.

The Spring Recess begins Thursday morning, April 12, 1900, and closes Wednesday evening, April 18.

MATRICULATION EXAMINATIONS, 1899.

Wednesday, June 14 and September 27.

9–10 a. m.—History.
10–11 a. m.—Science.
11 a. m.–1 p. m.—English.
3–6 p. m.—Latin.

Thursday, June 15 and September 28.

9–11 a. m.—Arithmetic and Algebra.
11 a. m.–12 m.—French and German (*elements*).
3–6 p. m.—Plane and Solid Geometry.

Friday, June 16 and September 29.

9–10.30 a. m.—Trigonometry.
10.30 a. m.–12 m.—Analytic Geometry.
3–6 p. m.—Greek.
3–6 p. m.—French and German (*minor courses*).
3–4 p. m.—French (*elements*).

STATEMENTS IN RESPECT TO THE COURSES OF INSTRUCTION.

The Johns Hopkins University offers instruction to students in the following classes:

1. College graduates and other advanced scholars, who may proceed to the degree of Doctor of Philosophy, in literature or science, or remain for longer or shorter periods in such of the various seminaries and laboratories as they may choose.

2. Undergraduate students looking forward to the degree of Bachelor of Arts and following any one of seven parallel groups of study.

3. Candidates for the degree of Doctor of Medicine, for whom a four years' course is provided.

4. Doctors of Medicine desiring to pursue certain post-graduate courses, which are annually announced.

5. Students who have taken no degree and are not looking forward to a degree, but who desire to avail themselves for a brief period of the opportunities here afforded.

FACULTY OF PHILOSOPHY.

Advanced and graduate students are received with or without reference to their being candidates for a degree, and they are permitted to attend such lectures and exercises as they may individually select. On entering the University they are expected to present their diplomas and certificates from the institutions with which they have been connected, and also letters of introduction. They are not examined for admission by the University, but each instructor satisfies himself of the

attainments of those who wish to follow his guidance, before admitting them to his classes.

The professors are free to give personal counsel and instruction to those who seek it; books and instruments adapted to investigations and advanced work have been liberally provided; the system of fellowships secures the presence of twenty special students imbued with the university spirit, most of them looking forward to academic careers; seminaries limited to a few advanced students have been organized in various subjects; societies devoted to philology, to mathematical, physical, and natural science, and to history and political science, afford opportunities for the presentation of memoirs and original communications, and there are also clubs for the reading and discussion of philological, biological, physical, and chemical papers; during the year courses of lectures are given by resident and non-resident professors on topics to which they have given special attention; the libraries of the Peabody Institute and Maryland Historical Society, founded for the advantage of scholars, are easily accessible; the issuing, under the auspices of the Trustees, of publications devoted to mathematics, chemistry, philology, biology, the modern languages, and history brings the University into advantageous connection with other foundations; and the University reading-room, which is constantly open, is liberally supplied with new and with standard books and with the literary and scientific journals of this and other lands.

Instruction is carried on in the different departments by methods which vary with the nature of the subject and the character and proficiency of the scholars; but in all alike the aim is the same,—that, while the student is becoming familiar with the work prosecuted and the results attained elsewhere, and is adding to his general intellectual culture, he may be encouraged to become himself an independent and original investigator in his chosen field of labor. Within reasonable limits the University will provide such books, apparatus, and material as may be requisite for this purpose.

The principal subjects in which advanced instruction is now provided are these:

Greek.
Latin.
Sanskrit and Comparative Philology.
Semitic Languages.
Anglo-Saxon and English.
German.
Romance Languages.
History.
Political Economy.
Comparative Politics.
History of Philosophy.
Mathematics.
Physics.
Chemistry.
Geology, Mineralogy, and Petrography.
Biology, including Zoölogy, Physiology, and Botany.
Pathology.

Greek.

The graduate instruction in Greek is directed by Professor Gildersleeve, in connection with the Greek Seminary, which consists of the Director, Fellows, and Scholars, and such advanced students as have satisfied the director of their fitness for an active participation in the work. All graduate students, however, may have the privilege of attending the Seminary exercises.

Each regular member is required to take his turn in the work of the seminary, and special fields of research are assigned according to progress or bent.

The cycle which has been followed for some years is made up of the Greek Historians, the Attic Orators, Plato, Aristophanes. For example:

1895–96.	Greek Historians.	1897–98.	Plato.
1896–97.	Attic Orators.	1898–99.	Aristophanes.

The methods followed have been described in successive annual reports, which may readily be consulted.

The work in the Seminary during the present year was concentrated on Aristophanes; for the next year the centre of work will be transferred to the Greek Historians.

In addition to the work of the Seminary (two meetings a week), courses of lectures are given by the Director and by other qualified persons.

Undergraduate students who select the classical group of studies are required to follow the class-work in Greek, four hours weekly through two years. The texts read vary from year to year, including selections from poets, historians, and orators. Exercises in

Greek composition and in reading at sight are likewise required. To extend the acquaintance of the student with Greek literature, he is obliged to read by himself certain prescribed authors, and to pass an examination upon them. An elective course of two hours a week for a half-year is also provided. The instruction of the undergraduates in Greek is conducted chiefly by Associate Professor Spieker.

The American Journal of Philology, edited by Professor Gildersleeve, has completed its nineteenth volume, and the twentieth is now in progress.

Latin.

Instruction in Latin is given on a plan similar to that already mentioned as followed in the courses in Greek. The advanced work proceeds through the organization of a Seminary, of which Professor Warren is the Director.* The instruction has two distinct ends in view. It aims first to give to students a wider and more accurate knowledge of the Latin language and literature than can be secured in the ordinary college course, so that they may become more efficient teachers; and, secondly, to train them in the methods of scientific research, so that they may become independent investigators. The most important instrument of training is the Latin Seminary, which meets twice a week during the year. Each year some author or a group of closely connected authors is made the centre of work. Critical methods are taught, interpretations are prepared by members of the Seminary in turn, and papers are read by them containing the results of special investigations on the syntax and style of authors and on other themes. The subjects treated during the last four years have been as follows:

1895–96. The Roman Historians, especially Livy and Tacitus.
1896–97. The Roman Epic, especially Vergil.
1897–98. The Roman Drama, especially Plautus and Terence.
1898–99. Cicero's Orations and Letters.

Courses of lectures are also given from time to time by the Director of the Seminary. For example, in 1898–99, Professor

* Professor Warren resigned May 1, 1899, after this was in type.

Warren lectured on Roman Oratory once a week during the first half-year, and on the Roman Forum and the imperial Fora, once a week in the second half-year. Throughout the year a Journal Club met every two weeks to report and discuss recent philological publications in the field of Latin. A class, meeting once a week, read the Incertus Auctor ad Herennium.

The undergraduate work in Latin varies somewhat according to the group of studies chosen. The works read differ year by year, but are so chosen that the student may become acquainted with historical, poetical, and philosophical authors. His work in the class-room must be supplemented by a prescribed course of reading which he follows privately and on which he undergoes examination. Latin composition and sight-reading form a part of the course. Associate Professor Smith and Dr. H. L. Wilson assist in this work.

Sanskrit and Comparative Philology.

Courses of instruction, under the direction of Professor Bloomfield, with the assistance of the Fellow in Sanskrit, are provided in the Indo-Iranian languages (Vedic and Classical Sanskrit, Pāli-Prākrit, Avestan or Zend, and old Persian), in comparative grammar of the Indo-European languages, in historical ethnology of the Indo-European peoples, in general linguistic science. During the sessions of 1897–98 courses in the Lithuanian language and literature were given for the first time, and instruction in one or the other of the ancient languages of the Balto-Slavic (Lithu-Slavic) family may be hereafter expected as a regular feature of the work of the department.

These instructions aim to meet the wants of those who wish to devote themselves to the study of these branches exclusively and for their own sake, *i. e.*, those who wish to become specialists in Sanskrit philology, or comparative philology; and also the wants of students of languages in general, who wish to obtain a broader linguistic basis for special studies in other departments of philology.

The advanced work aims especially to meet the wants of those who wish to make Indian philology or comparative philology

108315

their special study. Instruction is given by practical exercises, lectures, seminary work, and, where possible, the use of native Sanskrit manuscripts. The seminary is furnished with a carefully selected library, and approximately complete sets of the Oriental journals, as well as the journals in comparative philology, are freely accessible in the main library.

A prolonged course in Sanskrit, involving two lectures a week during two years and attendance in the Vedic Seminary for a half-year (one hour a week), is planned so as to furnish a good knowledge of classical Sanskrit, and to include an introduction into the dialect of the Vedas. This amount of work represents material sufficient for the first subsidiary subject for the degree of Doctor of Philosophy. A course in the same study for one and a half years, involving two hours a week, is the amount required for a second subsidiary subject leading to the same degree.

A synopsis of the courses offered during recent years may be presented under five heads:

I. Courses in the general principles of comparative philology or linguistic science, and on special chapters thereof; lectures on ethnology.

II. Courses in the general comparative grammar of the Indo-European languages; comparative grammar of Sanskrit and Avestan; comparative study of Greek accent; comparative study of Greek, Latin, Sanskrit, and Teutonic, including vocalism, consonantism, noun-formation, and inflections.

III. The Vedic, Sanskrit, and Pāli-Prākrit dialects; Rig-Veda; Atharva-Veda; literature of the Brāhmaṇas and Upanishads. The law-books of Manu and Yājñavalkya; Çakuntala and introduction into Prākrit; Hitopadeça, Kathāsaritsāgara, and Nala. Sanskrit grammar and prose-composition.

IV. The Avestan language and the literature of the Avesta.

V. Introduction to the Lithuanian language and literature.

Oriental Seminary.

In the Oriental Seminary, of which Professor Haupt is Director, both introductory and advanced instruction is provided in Oriental history and archæology, as well as in the principal Semitic languages, *viz.*, Hebrew (both Biblical and post-Biblical), Biblical Aramaic, Syriac, Arabic (both classical and modern), Ethiopic, Assyrian, etc.; also in Sumerian, Egyptian, etc. In the organization adopted in 1883, a course of three years was arranged. The

centre of work is the Old Testament, special attention being given to the critical study of Biblical texts and the cuneiform inscriptions bearing on the Scriptures. Professor Haupt is assisted by Dr. Christopher Johnston.

The various courses are adapted to the requirements of four classes of students, namely: (*a*) students of theology wishing to obtain a thorough acquaintance with the sacred tongue and its sister idioms as a means of elucidating Scripture and problems of the comparative history of religion; (*b*) students of linguistics intending to make comparative grammar of the Semitic languages their specialty; (*c*) students of Oriental history and archæology desirous of drawing directly from the original sources; (*d*) persons looking for instruction in the living Oriental languages (as modern Arabic, Turkish, Persian, Amharic, Malay, etc.), for practical purposes.

In these various courses, the seminary method is followed throughout, the student being from the first brought face to face with the several idioms, without long theoretical introductions. Stress is laid on a thorough grammatical training, imparted in connection with the minute philological analysis of some selected text in the respective languages, or by written exercises in translating from English into Hebrew, Arabic, Assyrian, etc., printed grammars serving only for occasional reference.

A room has been set apart containing a well-equipped working library for all the branches of Oriental research (including the library of the late Professor A. Dillmann, of Berlin, and the Strouse Rabbinical Library), and some advanced students are usually present to help in the preparation for the recitations conducted by the Director of the Seminary, and to furnish any other aid that may be desired.

English.

The instruction in English is given by Dr. James W. Bright, Professor of English Philology, Dr. William Hand Browne, Professor of English Literature, and Dr. Herbert Eveleth Greene, Collegiate Professor of English. Graduate and collegiate courses are provided in conformity with the principles followed in the

other language departments. Advanced students are instructed in the technical results of linguistic and literary science, and trained in the processes of original investigation. The college work is arranged upon a plan that prescribes for every student a systematic training in English Composition and in a critical study of standard prose. This is followed by an introductory course in English literature which is required of all students except those pursuing the studies of the Modern Language Group (Group VII); and a more advanced course is provided for those who may wish to continue the subject. The work of students in the Modern Language Group includes, first, a general survey of the history of English literature from the earliest times to the present day. After this preliminary course, more definite and minute study is bestowed upon prolonged courses that centre in the most significant periods of that history: these are courses in Anglo-Saxon; in the language and literature of the Middle English Period, and especially Chaucer and his contemporaries; in the Early Scottish Poets; in the Elizabethan period; and in the chief writers of the eighteenth and nineteenth centuries.

Graduate Courses.

The advanced courses in English are so arranged as to enable a student, in three or four consecutive years, to study with precision all the important departments of Grammar and of Literature. Instruction is imparted by lectures, by freer conferences, by the methods of the Seminary, and by class-room recitation. The Seminary (four hours a week) constitutes the chief organ of instruction and research. It supplies means for the inculcation of what is presented in the lectures, and for organized and prolonged concentration of effort on selected subjects. Usually the work of the Seminary centres each half-year in a different period of the literature, ranging from Anglo-Saxon to the present century. The literature of the period studied is investigated as to its sources, the history of its forms and traditions, and its artistic value; and linguistically the period is studied in its relation to the history of the language. The members of the Seminary also meet as a Journal Club (fortnightly) chiefly for reviewing the current philological (linguistic and literary) periodicals, and recently published

books and monographs. As supplementing the lectures and the Seminary, classes are organized for special training in textual criticism. There is also in alternate years an advanced course in the History and Theory of Rhetoric by Professor Greene, and annually a course of lectures on some department of English literature by Professor Browne. Weekly conferences and informal lectures furnish an opportunity for the discussion of many topics not provided for in the regular courses of the year, This hour is also in part occupied by lectures given by the students, who may thus acquire experience in the more formal presentation of the results of special study.

College Courses.

1. *Rhetoric and English Composition.* In this course, which is required of all undergraduates, the principles of good writing are inculcated. The use of text-books is supplemented by lectures and discussions, by weekly practice in the writing of short papers, a few of which are read and criticised in the class-room, and by the writing of longer papers, which are read and criticised privately with the writers. During the first half-year the study is directed to the elements of style,—the word, the sentence, and the paragraph. The weekly practice in writing is combined with an examination of the usage of standard writers. During the second half-year the various forms of composition—description, narration, exposition, and argument—are studied and practiced; the work also includes a critical study of standard prose in its various forms.

2. *English Literature.* The course in Rhetoric is followed by a prescribed course in English literature; and an additional course, which is elective, is provided for those who may wish to continue the study. These courses are for undergraduate students in Groups I–VI,—those who are not making a special study of the subject, but who wish such acquaintance with it as may be regarded a necessary part of a liberal education. The aim of the instruction in these courses is to give the student an outline history of English Literature, to teach him to read intelligently and with insight, and to lead him to read widely in the works of the more important writers.

The Major and Minor Courses are followed by those undergraduates whose studies are directed more especially to modern languages and their literature (Group VII).

3. In the English Minor a general course in English literature, from the earliest to recent times, is given, the text-book being Tyler's edition of Morley's *Manual.* In addition to the questions suggested by the text-book, the instructor supplements the work by oral instruction, the object being to make this course not a mere memorizing of names, works, and dates, but to give the class some living acquaintance with the more important authors, and to enable them to get some grasp of the literature as a continuous whole. The other part of this course consists of a study of the writers of the Early and Middle English periods, Morris and Skeat's *Specimens* being used as a text-book. The changes which both the language and the literature underwent during this transitional and formative period are dwelt upon, showing by what stages and under what influences Modern English was developed.

The major course in English—a third year's course—is divided between linguistic and literary studies.

4. *Anglo-Saxon.* An elementary course in Anglo-Saxon prose and verse occupies two hours a week for one year. The text-book used is Bright's *Anglo-Saxon Reader.*

5. In the literary part, one hour a week is given to the Early Scottish Poets from Barbour to Lindsay, whose work continues the great tradition of English literature during the otherwise somewhat dim period from Chaucer to Surrey. The texts are studied in a reader especially prepared for this class, and the necessary supplemental information, historical and other, is given by the instructor.

6. One hour a week is also given to the study of some important period of literature or group of writers sufficiently characteristic to be regarded as a whole. For the first half-year the Elizabethan writers have usually been taken, including the reading by the class of one play of Shakespeare. For the second-half some other period or group is selected.

It will be seen that the undergraduate work in the Major and Minor courses comprises: the earliest English or Anglo-Saxon;

the transitional literature from the Anglo-Saxon to Chaucer; the great period of Scottish literature between the times of Chaucer and Elizabeth; the great Elizabethans; and some important later period.

GERMAN.

This group of studies is under the direction of Professor Wood, with the assistance of Associate Professor Vos and Dr. T. S. Baker, Associate in German.

Instruction is provided in German of all periods, and in the earlier development of the other members of the Teutonic family of languages.

In the German Seminary, in which the graduate instruction centres, nearly equal attention is devoted to German Literature and German Philology. To enter upon the work of the Seminary in literature, the student should possess a knowledge of German equivalent to that imparted in the undergraduate courses, hereinafter mentioned, supplemented by private readings. For the seminary work in philology, it is desirable, in addition, that preliminary courses in Gothic and Middle High German should be first completed, and these may be taken with advantage by the student immediately upon entering. All graduate students of German are required to share in both the philological and literary work, and to direct their efforts to the attainment of broad results, which may serve as the foundation of scientific work and of successful teaching; but the Seminary and the allied graduate courses are believed to offer also sufficient opportunity and encouragement for the prosecution of chosen lines of work, whether on the linguistic or literary side, in accordance with individual capacity and bent. In this way, opportunity for independent research is afforded, within the framework of organized effort directed towards the attainment of results which concern the Seminary as a whole, and towards which each member is expected to contribute his share.

The subjects selected for the Seminary during recent years have been as follows:

1894-95. Minnesangsfrühling; German Literature in the Eighteenth Century.
1895-96. Goethe and Schiller (1786-1805); Walther von der Vogelweide.
1896-97. Goethe's Faust; Parzival.
1897-98. Goethe's Lyrical Poems; Nibelungenlied.
1898-99. Storm and Stress and Early Romanticism; Walther von der Vogelweide.

The Germanic Society, which meets fortnightly, supplements the work of the German Seminary; before it are presented not only reports on articles in current journals, but also successive results of studies by the members. The chief object of the Society is to foster and guide the aptitude for more sustained individual investigation than the Seminary proper offers scope for. Lists of the papers presented and discussed are given in the yearly reports.

In addition to the work of the Seminary (three meetings a week) other advanced courses are given. For example, in 1898-99, Professor Wood gave courses in Gothic and Old Norse (Sagas). Dr. Vos conducted classes in Middle High German, Vondel, and Middle Dutch, and lectured on History of Rime. A course on Contemporary German Drama was given by Dr. Baker.

The undergraduate courses in German are conducted chiefly by Associate Professor Vos, aided by Dr. T. S. Baker, with such other assistance as may from time to time be required. A course in elementary German is given for candidates for matriculation who have entered with Greek. This is followed by the regular work in German during the first college year, a course required of all undergraduates. Nearly equal portions of the German drama and of German literary prose are read. Private readings and weekly exercises in prose composition supplement the class readings.

Undergraduates in Group VII who elect German, or undergraduates in any of the seven groups who substitute German at this point in their course, pursue the study during a second year. The readings from the classical period are continued in texts of greater difficulty, and instruction is given in the history of German literature and in the writing of German prose.

An elective course (rapid reading of contemporary literature) is offered to undergraduates who have completed the work in German of the first college year. A second elective in scientific

readings is open to undergraduates who are preparing to enter the Medical School.

Classes are also provided in Conversational German and in Historical and Scientific Readings, for graduates who lack the ability to read the language at sight.

Romance Languages.

Advanced instruction in Romance Languages is so planned as to cover at least three years, and is directed by Dr. A. Marshall Elliott, Professor of Romance Languages, with the assistance of Dr. Rambeau, Dr. Marden, Dr. Armstrong, and others. The subjects of instruction are divided into three distinct sections: a purely linguistic, a purely literary, and a composite group which is intended to unite the first two. Every one who intends to take a degree in Romance Languages must work in these three lines, which are so arranged as to supplement one another according to the attainments and bent of the student, and which are concentrated, for given periods of the course, on the same linguistic domain. The first year is chiefly spent in preparation for seminary work, to which the student is generally admitted, as an active member, at the beginning of the second year. During this preliminary period a practical knowledge of the principal Romance languages is acquired (a thorough acquaintance with Latin and modern French being pre-supposed); a brief survey is given of the history of the science, together with an introduction to the use of scientific methods in language and literature. With this equipment the student is prepared to begin an appreciative scrutiny of special texts with their critical linguistic and literary apparatus. He is taught to handle his materials with discriminating judgment, and, according to his progress, subjects are assigned to him for investigation which tend to develop the patience and accuracy necessary to a careful investigator. In literature, as in language proper, it is particularly to the origins that his attention is directed, though constant reference is made, by way of comparison, to the modern forms. By extensive reading required in connection with the subjects taken up, he is made familiar with the different phases

of opinion held by leading European scholars, and is thus enabled to control certain parts of his subject within well-defined limits. After the first year the student is expected to concentrate upon some single line of work within his general field. It will be observed that the student's work in this course is comparative, and that he moves from the general to the particular. In the early part of it, the object is to give a broad basis to work on, by making him so familiar with the principal Romance idioms that he may use them readily, by way of illustration, in his subsequent studies. Dialect study and phonology are made essential features of this plan of studies.

The subjects to which attention has been given in the Seminary in past years are as follows:

1883–84. Anglo-Norman Dialect and the Oaths of Strasburg.
1884–85. Cantilène de Sainte Eulalie and Fragment de Valenciennes.
1885–86. The Franco-Norman Dialect, with the Vie de Saint Alexis.
1886–87. The Oaths of Strasburg and the Cantilène de Sainte Eulalie.
1887–88. Old French Paraphrase of the Canticum Canticorum and the Fragment de Valenciennes.
1888–89. The Oaths of Strasburg and the Cantilène de Saint Eulalie.
1889–90. *Reimpredigt:* Grant mal fist Adam.
1890–91. L'Epopée royale: Pèlerinage de Charlemagne.
1891–99. Marie de France: Fables.

In addition to the work of the Seminary, lectures are regularly given at stated periods of the course: (1) on French phonetics, physiological and historical, (2) on Old-French syntax, (3) on Romance morphology, (4) on French dialects, (5) on Italian dialects, (6) on Old-French palæography, (7) on the history of French Philology, (8) on the linguistic ethnography of France and Italy, (9) on the sources of Romance Philology, (10) on Popular Latin, (11) on Italian philology and literature, (12) on Spanish philology and literature, (13) on Old-French literature, (14) on Modern-French literature, (15) on Romance versification, (16) on methodology of the Romance languages.

The special lectures on French literature are arranged to run through the whole period of three years, and form an important part in the training of the student.

A special publication, Modern Language Notes, now in its fourteenth volume, is issued monthly by members of the modern

language departments, in which are presented the most recent literary and scientific aspects of linguistic research in the modern idioms.

The undergraduate classes in French are conducted by Associate Professor Rambeau, with several assistants. Students in Group VII who elect French, follow class work for four hours weekly through two years, during which time they read extensive selections from Modern and Middle-French texts, and are made acquainted with the general laws of French phonology and morphology. All undergraduates must complete the work of the first of these two years. Private reading is required, varying from year to year according to the authors taken up in class.

Courses in Italian and Spanish are also provided for undergraduates.

History, Economics, and Politics.

The work of this department is under the direction of Professor Adams, who devotes special attention to institutional and educational history. He is aided by Associate Professor J. M. Vincent, in European history; Associate Bernard C. Steiner, in American history; Associate J. C. Ballagh, in classical history and American economic history; and Dr. G. C. Lee, in English history and parliamentary law. In economics, the work is guided by Associate Professor Sidney Sherwood, aided by Dr. J. H. Hollander, associate in economics. In politics, systematic instruction throughout the year is given by Dr. W. W. Willoughby, associate.

As at present organized, the work of the department aims to accomplish three main results:

1. The preliminary training of students, both graduate and undergraduate, to such a knowledge of the essential facts and principles of general history and politics as will contribute towards a liberal education and serve to fit men to pursue advanced courses in special branches of these sciences, with a view to taking the doctor's degree or to entering the work of education, law, journalism, charity organization, or the civil service. This training process is pursued in undergraduate class courses, where systematic and positive instruction is given by means of required text-books,

lectures, essays, oral reports, and constant drill. The undergraduate work extends in its various sections, over a period of three years (see College Courses, Sixth Group, beyond). A course in European History, taken in connection with the outlines of Economics, is also required of every undergraduate student not in the Historical Group. Graduates of other institutions who have not had the equivalent of these preliminary courses in History and Politics, or who do not possess a knowledge of French and German, are expected to make up their deficiency by extra work in undergraduate classes.

2. Advanced instruction in history, economics, politics, social science, statistics, historical and comparative jurisprudence, historical criticism, methods of research, historiography, for graduates or special students of mature years, if qualified by ability and previous studies to pursue such courses. Undergraduates pursuing a course for the bachelor's degree are not allowed to take graduate work. Advanced instruction is given chiefly by lectures, accompanied by private readings by the students, and by frequent examinations, both oral and written, upon special subjects.

3. The development of a spirit of original research among the more advanced members. This end is attained chiefly in individual ways by the constant association and co-operation of students and instructors, not only in advanced classes and in various fields of special work, but in organized societies called Seminaries, or Conferences, of History, Economics, and Politics, meeting in the department library for the report and discussion of original studies. The scientific researches of graduate students are chiefly in fields of American institutional and economic history, but also in the broader domain of comparative politics and economics, social science, and education. The best results of original and organized inquiry by this department are published in the volumes of "Historical Studies." Under the direction of Professor Adams, the history of higher education in the United States is being written by students and collaborators representing individual States. The results are published by the U. S. Bureau of Education. The results of original economic investigation have hitherto appeared in the "Studies," in the Publications of the American Economic Association, and in leading economic journals.

The following general statements will suffice to characterize the various courses of instruction. Details may be found in the annual announcements.

(*a*) *History.*—Professor Adams gives to graduate students six courses of lectures (two courses each year) upon institutional history. He selects representative phases of ancient and modern civic society. One-half of the first year is devoted to the early history of institutions and to Greek politics; the second half, to the history of Prussian politics and the nineteenth century. The first half of the second year is given to Roman constitutional history; the second half to French absolutism and the history of the French Revolution. In the third year particular attention is given to German peoples and their early migration and federations, during the first half; during the second half, to Anglo-American institutions. Each year's work is independent and complete in itself. Professor Adams also gives courses of instruction in educational history, the history of civilization, Church history, the Italian Renaissance, and the history of international relations.

Dr. James Schouler, author of the History of the United States under the Constitution, gives in successive years short courses of lectures on American political and economic history. Next year he will probably lecture on American political biography.

Dr. Vincent lectures to graduates on (1) the social and economic history of Europe, (2) the Reformation and the Protestant Revolution, (3) the science of historical investigation and the general history of historical writing. He also conducts (4) a special conference of graduate students in the study of selected historical problems, and has charge of undergraduate courses (5) in European history, (6) in general Mediaeval and Modern history.

Dr. Steiner conducts an undergraduate course in American political and constitutional history.

Dr. Ballagh has collegiate classes in Greek and Roman history and conducts graduate conferences on American economic history and Municipal Government.

Dr. Lee conducts a collegiate course in English Constitutional Law and History; also courses in Debating and Public Speaking.

(*b*) *Comparative Politics.*—Dr. Willoughby conducts a political conference and gives courses of class lectures upon the following subjects: (1) Theory of the State; (2) The Federal State in

Theory and Practice; (3) History of Political Philosophy; (4) Legal Aspect of Economic and Industrial Problems.

(*c*) *American Diplomatic History.*—Dr. Albert Shaw, editor of the American monthly *Review of Reviews*, and a graduate of this department of the Johns Hopkins University, has provided for a course of lectures on the above subject for the years 1899 and 1900. Dr. John H. Latané is the first appointed lecturer.

(*d*) *Economics and Social Science.*—Systematic instruction is offered both in the general theory and in the most important special fields of economic science. Effort is directed to promote the mastery of sound methods of research. Considerable attention is given to the history of the science itself as one of the best means of studying the development of economic life and institutions.

Dr. Sherwood conducts the following graduate courses: (1) Economic Seminary, meeting two hours weekly; (2) nine courses of lectures, planned to extend over a period of three years, the subjects being (*a*) theory of credit, (*b*) corporations, (*c*) principles of economics, (*d*) transportation, (*e*) commerce, (*f*) banking, (*g*) money, (*h*) law and economics, (*i*) economic sociology.

Dr. Hollander lectures upon (1) science of finance, (2) history of economic theories, (3) financial and industrial history of the United States. In 1897–98, his courses were (*a*) the economic system of David Ricardo, (*b*) the development of commonwealth taxation in the United States. In 1898–99, he considered, during the first half of the year, the development of economic theories since Adam Smith; the second half, he reviewed the history and theory of industrial crises. Dr. Hollander also conducts a class in the study of Current Congressional History.

Undergraduate instruction, conducted by Doctors Sherwood and Hollander is given as follows: (1) course in general economics (Minor Politics), four hours weekly throughout the year, required of students in group VI; (2) course in general economics, two hours weekly throughout the year: taken in connection with a two-hour course in European History, this forms the History-Economics course required of all undergraduates not in Group VI; (3) advanced economics, two hours weekly throughout the year, open as an elective course to students who have taken either (1) or (2).

PHILOSOPHY.

A course in the History of Philosophy, for graduate students, is given by Professor Griffin, in which Bacon's Novum Organum (Book I), Descartes's Method, Meditations, and Principles of Philosophy, Spinoza's Ethics, Leibnitz's Monadology, Locke's Essay on Human Understanding (Books I, II, IV), Berkeley's Principles of Human Knowledge, Hume's Treatise on Human Nature (Book I), Kant's Critique of Pure Reason and Critique of Practical Reason (in Watson's "Selections") are read and discussed.

The instruction in Philosophy offered at present is, however, mainly undergraduate, consisting of required courses in Logic, Psychology, and Ethics, which occupy five hours per week throughout the year.

(*a*) *Logic.* The logical forms—terms, propositions, syllogisms—are studied as an analysis or explanation of the thinking process, and as a practical discipline in exact thought; attention is given also to the material elements in inference, as these are stated in the various inductive methods.

The work is conducted by means of recitations—Jevons's Elementary Lessons in Logic and Fowler's Elements of Inductive Logic being used as text-books,—informal lectures, and written exercises in the definition and division of terms, in the opposition and conversion of propositions, in the application of syllogistic rules, in the criticism of arguments, etc.

(*b*) *Psychology.* The instruction in Psychology is intended to give a general view of the results of the new methods of study, the investigations in regard to the quality and intensity of sensations, the duration of psychic acts, etc.—in general, the subjects treated in the second part of Ladd's Physiological Psychology—being presented with sufficient detail to render them intelligible and interesting. A series of lectures and demonstrations on the anatomy and physiology of the nervous system by Dr. L. F. Barker is included in the course.

Especial emphasis is laid upon the facts of conscious experience as known through introspection, the most important end to be secured being, as it is believed, such an understanding of the facts and laws of mental life as shall fit one for wise self-government

and effective influence. With this view, such powers and states of mind as attention, memory, association, habit, imagination, the feelings, the will, are discussed in as concrete and practical a way as possible. Baldwin's Elements of Psychology and Ladd's Outlines of Physiological Psychology are used as the basis of instruction, but these are largely supplemented by lectures, and by references to various authorities. An essay on an assigned subject is required from each member of the class.

(*c*) *Ethics.* Ethics is treated with reference to its fundamental problems as a theoretical science, and also from a practical point of view. Its psychological basis in the various forms of feeling native to our constitution, and in the power of rational self-determination; the nature of the sense of obligation; the authority of conscience; the diversities of moral opinion; the historic theories of morals—hedonism, utilitarianism, intuitionism, and the application to ethical theory of the doctrine of evolution—these are some of the topics discussed.

Fowler's Principles of Morals, Part II, is employed as a textbook, but the instruction is necessarily given, to a considerable extent, through lectures. One essay is required from each member of the class.

(*d*) *History of Philosophy.* An outline of the history of philosophy is given in a series of lectures, some of which are included in the prescribed instruction, and some of which are for the benefit of any who may be disposed to attend them.

Mathematics.

The instruction in Mathematics is at present entrusted to Professor Newcomb, Professor Craig, Dr. Hulburt, Collegiate Professor of Mathematics, and Dr. Cohen, Associate in Mathematics.

The more advanced courses vary from year to year, and are so arranged that a student who remains here two or three years may receive continued and systematic guidance in any of several directions. The less advanced subjects are nearly the same every year. Students properly qualified have open to them most or all of the following courses in any three consecutive years:

Under the general heads of Arithmetic, Algebra, and Geometry: Theory of Numbers, Theory of Substitutions, Theory of Invariants, Theory of Surfaces and Twisted Curves, Higher Plane Curves, and Synthetic Geometry. Courses are also given in Finite Differences and in the Theory of Probabilities.

Under the head of Analysis: Theory of Functions of One and More Complex Variables and Functions of Real Variables, Algebraic Differential Equations, Linear Differential Equations, Partial Differential Equations, Algebraic Integrals of One and Two Variables, Elliptic Functions, Abelian and Theta Functions, Automorphic Functions and their application to linear differential equations.

Under the head of Applied Mathematics: Rational Mechanics, Theoretical Dynamics, Celestial Mechanics, Kinematics, Theory of Attractions, and Theory of the Potential, the latter involving a full account of Neumann's, Schwarz's, and Poincaré's methods for Dirichlet's Problem.

Undergraduates are annually instructed in Elementary Analytic Geometry, Theory of Equations, Elements of Projective Geometry, Differential and Integral Calculus, Differential Equations, Solid Analytic Geometry.

Seminary work is carried on by Professor Craig. Short courses of lectures on special subjects other than those mentioned above are given from time to time during the year by Professor Craig, and by others who may be invited to do so.

A large number of mathematical journals are regularly received, besides the publication of learned societies abroad and at home. Among the journals received are the following (the asterisk indicating full sets):

Journal für die reine und angewandte Mathematik* (Crelle); Journal de Mathématiques pures et appliquées* (Liouville); Comptes Rendus; Mathematische Annalen*; Monatshefte für Mathematik und Physik*; L'Intermédiaire des Mathématiciens*; Bulletin des Sciences mathématiques*; Journal de l'École Polytechnique; Annales de l'École Normale; American Journal of Mathematics*; Annali di Matematica*; Giornale di Matematica*; Acta Mathematica*; Archiv für Mathematik und Physik* (Grunert); Zeitschrift für Mathematik und Physik*; Proceedings of the London Mathematical Society*; Bulletin of the American Mathematical Society*; Bulletin de la Société mathématique de France*; Rendiconti del Circolo Matematico di Palermo*; Quarterly Journal of Mathematics*; Messenger of Mathematics; Annals of Mathematics*, etc.

The University has a collection of about two hundred and thirty geometrical methods, illustrating the forms of mathematical solids, surfaces, and curves, their singularities and varieties, and the methods of descriptive geometry by which they are represented on a plane.

The American Journal of Mathematics, founded by Professor Sylvester, and edited in recent years by Professor Craig, with the coöperation of Professor Newcomb, has completed its twentieth volume. Volume XXI is in progress. Beginning with Volume X, there has been published in each volume the portrait of an eminent mathematician. Those so far published, and in the order of publication, are as follows: Sylvester, Hermite, Poincaré, Cayley, Klein, Halphen, Lie, Picard, Appell, Fuchs, Darboux, Newcomb.

Physics.

The instruction in Physics is under the charge of Professor Rowland, Director of the Laboratory, with the aid of Professor Ames, Sub-Director of the Laboratory, Dr. W. J. A. Bliss, Dr. N. E. Dorsey, Mr. J. B. Whitehead, and several assistants.

The laboratory is a substantial brick building 117 feet long by 71 feet wide, with five stories besides a basement and a sub-basement, and is so situated as to receive light from all sides. Power and heat are furnished from separate buildings.

The physical apparatus includes an equipment for lectures and demonstrations and a valuable collection of instruments for elementary work and research. Many of these have been made from special designs, others are standard instruments which have been purchased from European and American makers; all of them have been most carefully selected. Special facilities, in some cases almost unique, are afforded those wishing to carry on investigations in electricity and in light.

The physical and mathematical libraries of the University are now placed in McCoy Hall, where they are easily accessible at any time. The physical section contains complete sets of almost all the physical journals published in this country and abroad, and all the standard books of the present and the past. About

sixty periodicals, English, French, German, and Italian, are received. Certain magazines and books of reference are, however, retained in the Seminary Room of the laboratory, where the advanced students can consult them at any moment. This small collection is specially selected each year with reference to the courses of advanced instruction offered that year. Among the magazines kept on file in the laboratory are the following:

Philosophical Magazine, Physical Review, The Astrophysical Journal, Wiedemann's Annalen and Beiblätter, Zeitschrift für Physikalische Chemie, Journal de Physique, Comptes Rendus, Proceedings and Transactions of the Royal Society of London, the Proceedings of the London Physical Society, L'Eclairage Electrique, and The Electrician (London).

Instruction and facilities for work in the laboratory are offered all classes of students, elementary and advanced. The following is a general view of the courses:

First Year (Minor) Course.—This is intended for students who are beginning Physics, or who have not a sufficient knowledge of the principles of the subject to warrant their undertaking more advanced work. To enter this course a student must be able to use logarithms and must have studied plane trigonometry, at least as far as through the solution of right-angled triangles. The lectures are accompanied by demonstrations; and mechanics, sound, heat, electricity and magnetism, and light are taken up in succession. Recitations on the subjects treated in the lectures are held regularly, and the course continues, four hours weekly, through the year. Along with the lectures the student does regular work in the laboratory, three hours a week, performing simple quantitative experiments, which illustrate the facts and principles considered in the class-room. Written records of lectures and reports of laboratory exercises are required.

Second Year (Major) Course.—This is designed to meet the needs of students who have already taken either the first year's course, or its equivalent, and who wish to pursue further their physical studies. A working knowledge of analytic geometry and calculus is required for admission to this course. The lectures take up the mathematical side of physics largely, and are on the following subjects:

Mechanics, extending to some of the simpler problems in the dynamics of rigid and elastic bodies.
Thermodynamics.
Electricity and Magnetism.
Geometrical and Physical Optics, with special reference to diffraction phenomena.

Recitations are held regularly, and the course continues, four hours weekly, through the year. The laboratory work of this year occupies five hours a week, and includes problems that present greater difficulties, experimental or theoretical, than those of the first year. The student is allowed the choice of work in mechanics and electricity, or in heat and light. Written records and reports are also required in this course.

Advanced Work.—For the instruction of those students who have the necessary preparation, certain lectures are given in Mathematical Physics. There is one course, continuing through two years, which includes thermodynamics, heat conduction, physical optics, electricity and magnetism. As a preparation for this course, students are advised to take a preliminary course for one year, which treats briefly one or two subjects such as hydrodynamics, theory of elasticity, sound, mechanics, or theory of attractions. These lectures develop fully the mathematical theory of the subjects; and to follow them the student should have a satisfactory knowledge of differential equations and analytic geometry of three dimensions. Authors like Lord Kelvin, Lord Rayleigh, Maxwell, von Helmholtz, Poincaré are referred to continually, and the ability to read French and German is absolutely necessary.

The advanced students meet with the instructors once a week for the discussion of the current physical journals. Carefully prepared reports on various articles are here presented.

The Physical Seminary, to which only the most advanced students are admitted, meets one morning each week. The work of the seminary consists of two distinct exercises. One is the reading of some physical treatise and a consideration of the problems suggested by it; the other is the presentation of critical papers upon various assigned topics which are of special or historical importance.

An effort is made to render the laboratory as useful as possible to advanced students and investigators. Those who are prepared for such work will have the facilities which it affords placed most freely at their disposal, and will receive all possible assistance.

Chemistry.

The instruction in Chemistry is under the charge of Professor Remsen, Director of the Laboratory, with the coöperation of Professor Morse, Sub-Director, Professor Renouf, First Assistant, Dr. Gilpin, Second Assistant, Dr. Jones, Associate in Physical Chemistry, Dr. Reese, and other aids.

The higher or graduate work is based upon that given in the two years' undergraduate course, and those graduates of other colleges who have not followed courses equivalent to this, begin with that part of the undergraduate work which appears best suited to their needs. The following outline of the work will give some idea of its character:

Undergraduate work: First year.—From five to six hours each week through the year are given to laboratory practice. Three lectures are given each week by Professor Renouf, and one review on the subjects treated in the lectures and on the laboratory work is conducted by Profesor Renouf and Dr. Gilpin. The ground covered by this course is approximately that laid down in "An Introduction to the Study of Chemistry" by Ira Remsen (Holt, New York), which is the text-book used.

Undergraduate work: Second year.—In this year the same amount of time is given to the laboratory as in the first year. The object in view is to give a more complete knowledge of the phenomena of chemistry than is given in the first year. The making of preparations of both inorganic and organic compounds plays an important part in the work. Further, the study of analytic reactions and of analysis is taken up as far as the time permits. Besides the laboratory practice, the course includes class-room work as follows: From October 1 until the Christmas

recess four exercises a week in general inorganic chemistry, based largely upon the laboratory work, and conducted by Professor Morse. As a book of reference to be used in connection with the laboratory work of this part of the course, and also for general study, Remsen's "Inorganic Chemistry: Advanced Course" (Holt, New York) is recommended. From January 1 until the end of the year the study of the chemistry of the compounds of carbon is taken up, the class-room work, which is based upon Remsen's "Introduction to the Study of the Compounds of Carbon" (Heath, Boston), occupying four hours a week, under the guidance of Professor Morse.

Graduate work.—The greater part of the work in the advanced courses is carried on in the laboratory. The subject of qualitative analysis is taken up thoroughly after a careful study of reactions as laid down in the "Introduction to Chemical Analysis" by Volhard and Zimmermann, while at the same time the study of general chemistry is continued. A prolonged course in quantitative analysis follows. The analytical work, which is under the supervision of Professor Morse, requires about a year. After this, an opportunity is given for the preparation of a variety of compounds involving methods of general importance, or illustrating important classes. A course in the methods of physical chemistry, such as the determination of molecular weights by observations on the boiling-points and freezing-points of solutions, measurements of electrical conductivity, etc., is conducted by Dr. Jones. The course in the preparation of organic compounds is that laid down in Remsen's "Introduction to the Study of the Compounds of Carbon," supplemented by selections from Levy's "Anleitung zur Darstellung organischer Präparate," Fischer's book of the same title, and Gattermann's "Die Praxis des organischen Chemikers." This work is under the personal supervision of Professor Remsen. During the last year of his course the student undertakes an investigation, generally under the guidance of Professor Remsen, and, in case he is a candidate for the degree of Doctor of Philosophy, his thesis is based upon the results obtained in the investigation.

Special lectures are offered to advanced students, the topics varying from year to year. During the current year Professor

Remsen gave four lectures a week to graduate students on the History of Chemistry, showing the development of the subject to the present time. Throughout the year Dr. Jones gave a course of lectures on Physical Chemistry twice a week. There was also a course of twenty-three lectures in the field of historical chemistry, in which the advanced students took part, each one working up an assigned topic, and presenting the results in the form of a lecture. Meetings were held weekly during the year to hear reports upon the more important articles in journals of chemistry. Next year, 1899–1900, Professor Remsen will lecture four or five times weekly, through the entire year, on the chemistry of the Compounds of Carbon, for graduate students. Lectures on Physical Chemistry will also be given as this year. The historical course and the journal meetings will be continued.

While, in the courses outlined above, the books mentioned are used as the guides, the instruction is in no case confined to what is presented in the book. Students are constantly referred to the journals and other publications containing articles bearing upon their work. Further, *the chief instruction in every course is that given in the laboratory.*

As regards the time required by a graduate student to complete the work for the degree of Doctor of Philosophy, it can only be said that one who has the necessary qualifications can generally do it in three years, after following such a course as that given to the undergraduates of this university who take the two years' course in chemistry. Those who have not had this preparation will generally require a longer time. There are no stereotyped courses leading to the higher degree, and it is impossible to say exactly what must be accomplished to attain it. What is desired is a certain maturity of mind with reference to the science of chemistry, and an ability to deal with chemical problems intelligently. This condition of mind is reached, if reached at all, by long-continued laboratory training accompanied by careful study of chemical journals and treatises. It may be said finally that the arrangements of the laboratory are made mainly with reference to those who wish to take up the study of chemistry in a broad way, and that those who want short courses in special branches of chemistry are not advised to come here. It is believed that whatever object the student may have in view,

whether he intends to teach or to follow some branch of applied chemistry, the best preparation he can have is a thorough training in the pure science.

The American Chemical Journal, edited by Professor Remsen, is now in its twenty-first volume. Beginning with the year 1899 twelve numbers will be published each year; these will make two volumes.

Geology.

The instruction in Geology is under the direction of Professor W. B. Clark, assisted by Dr. H. F. Reid, Associate Professor of Geological Physics, Dr. E. B. Mathews, Associate in Mineralogy and Petrography, Mr. O. L. Fassig, Instructor in Climatology, and Dr. G. B. Shattuck, Instructor in Physiographic Geology.

An important course of lectures is given annually by Mr. Bailey Willis, of the U. S. Geological Survey, Lecturer on Stratigraphic and Structural Geology. Shorter courses are given by Professor Cleveland Abbe, of the U. S. Weather Bureau, Lecturer on Meteorology, and by Dr. L. A. Bauer, of the U. S. Coast and Geodetic Survey, Lecturer on Terrestrial Magnetism.

The George Huntington Williams Memorial Lectureship in the Principles of Geology was inaugurated in April, 1897, by Sir Archibald Geikie, Director-General of the Geological Survey of Great Britain and Ireland. A second course of lectures by Professor W. C. Brögger, of the University of Christiania, will be given during the autumn of 1899.

The courses in geology, which are offered to both graduate and undergraduate students, consist of lectures, laboratory and field work, and conferences upon topics of current literature. Great importance is attached to laboratory training as a part of the geological course, and facilities are given for daily work from 9 a. m. to 5 p. m.

Commodious rooms have been fitted up in Hopkins Hall for the uses of the geological department, and contain the books, apparatus, and collections pertaining to geology.

Lecture Courses.—I. General Geology.—This course is planned to serve as an introduction to all work in geology, for both under-

graduate and graduate students, irrespective of the particular department in which they may choose their principal subject.

The lectures embrace a general survey of the whole field of geology, and are illustrated by rocks and fossils, by maps and sections, and by lantern views. Excursions are made on Saturdays, during the autumn and spring months, into the surrounding country. During the winter months an afternoon weekly is devoted, in the laboratory, to the exposition of specimens of rocks, fossils, and minerals.

II. Paleontology.—Attention is devoted to both the biological and geological relations of the important types of the animal and plant kingdoms. The phylogenetic history of the leading groups is also traced out in considerable detail wherever possible.

III. Historical Geology.—In this course the classification and distribution of the sedimentary rocks are fully considered. The value of fossils in the determination of horizons is explained, and a detailed study made of the geological literature of the different countries of the globe. An extensive series of maps is in constant use to illustrate the course.

Courses II and III are given in alternate years, if thought desirable.

IV. Experimental Geology.—Geological phenomena, which depend directly upon physical principles, such as volcanoes, earthquakes, geysers, flow of rivers, production of folds, faults, etc., are treated theoretically, and, so far as possible, experimentally.

Laboratory work accompanies the course, the student being given an opportunity to make experiments of his own.

V. Geological Physics.—In this course the size and shape of the earth, the temperature, rigidity, age, magnetic conditions, etc., are discussed.

VI. Exploratory Surveying.—The simple methods of determining geographical position; the methods of rapid route surveying; the use of the plane-table, the camera, etc., are considered with especial reference to travellers and explorers. The principles of map projection are explained. Practical instruction in the use of the instruments is given.

VII. General Mineralogy.—This course is divided into three parts. The lectures treat of the crystallography, the general physical properties, and the description of mineral species. The labo-

ratory course includes work with crystal models, goniometers, and blow-pipes. Emphasis is laid on the mode of formation and geological occurrence of minerals. The course closes with a discussion of the leading types of rocks.

VIII. Advanced Mineralogy.—The lectures include a full discussion of optical and microscopical mineralogy. Especial attention is given to the behaviour of minerals as constituents of rock masses.

IX. Petrography.—This course includes a discussion of methods and a description of the structures and physical properties of rocks. The second portion of the course is devoted to the special petrography of the igneous rocks, including a study of their various classifications and a discussion of their origin, distribution, and literature. The consideration of the more common sedimentary and metamorphic rocks concludes the course.

Courses VIII and IX are given in alternate years, if thought desirable.

X. Climatology.—In this course of lectures the topics chiefly considered are: Heat and its distribution over the earth's surface; rainfall and evaporation—their distribution and effects; winds and storms; weather sequences as illustrated by the daily weather charts of the U. S. Weather Bureau; extent to which topography influences the distribution of the climatic elements; variability of climates; organization and methods in statistical meteorology.

XI. Physiographic Geology.—This course deals primarily with the description of topographic forms, and includes a discussion of their origin and classification. The lectures are illustrated with maps, models, and lantern views.

XII. Geological Drawing.—An opportunity is afforded in this course to learn the methods of map and section drawing and coloring, together with such other lines of geological illustration as the student may desire. The sketching of geological sections in the field is included in the course.

XIII. Stratigraphic and Structural Geology.—This course consists of a description of the processes which result in the formation and upheaval of sedimentary rocks. Erosion is discussed with special reference to conditions governing the character of detrital materials. Sedimentation is considered as a complex process of sorting, distribution and deposition of the waste of land areas, and

deformation is treated as the process which initiates erosion, and also, as applied to folding, as the indirect result of excessive deposition. The mechanics of rock folding and thrusting are illustrated both by actual sections of the Appalachians and by experimental results. The whole course centres on a discussion of the principles which should govern the interpretation of the sedimentary record.

XIV. Meteorology.—A few lectures are given by Professor Abbe, at irregular intervals, on the principles of meteorology.

XV. Terrestrial Magnetism.—Dr. Bauer will give a few lectures on the principles of terrestrial magnetism and the relations to geology and climate.

XVI. Principles of Geology.—(The George Huntington Williams Memorial Lectureship.) A course of lectures will be given by Professor W. C. Brögger, of the University of Christiania, during the autumn of 1899.

Laboratory Work.—Laboratory courses are arranged to accompany the lectures, while advanced or special students will be given the opportunity to carry on fuller investigations upon either described or new materials.

The introductory laboratory work will consist of a study of materials designed to illustrate Lecture Course I, and will include typical fossils and minerals, together with maps, models, and sections of fully described areas.

Specially selected materials will also be employed to illustrate the more advanced courses. Extensive collections for both the organic and inorganic work are owned by the University, and include both determined and undetermined specimens.

Experiments will be made in connection with the work in Experimental Geology.

For those who plan to carry on original investigations large series of undescribed materials will be found accessible, while the immediate region affords exceptional opportunities for further collecting. Several such special pieces of work relating to the local area have been already published, while others are at the present time under consideration in the laboratory.

Conferences and Student Lectures.—In order that the advanced students may be kept in touch with the most recent investigations

in the science, conferences are held at which the leading journals in geology are reviewed by the students under the direction of the instructors. The conferences take place bi-weekly.

In order that the advanced students may also have the experience necessary for the successful preparation and delivery of class-room lectures, a course upon some phase of geology is arranged, a special topic being assigned to each student. The lectures take place bi-weekly, alternating with the conferences.

Field Work.—The area of the State of Maryland includes, notwithstanding its comparatively small size, a remarkable sequence of geological formations. The ancient rocks of the earth's crust, as well as those still in the process of deposition, are found, while between these wide limits there is hardly a geological epoch which is not represented. As a result, most excellent facilities are afforded for a study of the various geological horizons.

During the autumn and spring, excursions are made upon Saturdays into the surrounding country, the crystalline areas and the various Cretaceous and Tertiary formations being readily accessible. More extensive excursions are made from time to time into the early Mesozoic and Paleozoic areas of the western portion of the State, and into the highly fossiliferous Tertiary region of the lower Chesapeake Bay.

After the student has become familiar with the various regions under the guidance of the Instructors, he is encouraged to take up the study of some specified area, where, according to his inclinations, he may carry on investigations upon the older crystalline rocks or the later fossiliferous strata. Several theses of this nature have been already presented for the degree of Doctor of Philosophy.

Geological Camp.—Arrangements are made annually for a geological encampment of several weeks after the close of the class-room lectures at the University.

Those who are present receive thorough training in field methods along various lines under competent instructors. Complete instrumental outfits, employed in geological, topographical, climatological, hydrographical and agricultural investigations, are provided and daily use is made of them. Special lecturers are secured. The first camp was established in 1898 in the vicinity of Cumber-

land, in the heart of the Appalachian Mountains, and the various physical features of the district were studied by those in attendance. The camp in 1899 will be located on the shores of the Chesapeake Bay.

Geological Laboratory and Library.—The Geological Laboratory is situated in Hopkins Hall, and comprises over thirty rooms, large and small. Here are placed the library, apparatus and collections, which are accessible to the student daily from 9 a. m. to 5 p. m.

In accordance with the custom of the University, those books relating to the work of the Geological Department are given into its charge, the books of general reference being retained in the University Library.

The main room upon the third floor, called the Williams room, contains the collections and library of the late Professor George Huntington Williams. A smaller room upon the same floor contains the books and collections of the late Professor H. Carvill Lewis and is known as the Carvill Lewis room.

A room upon the second floor contains the valuable meteorological library recently presented to the University by Professor Cleveland Abbe, of the U. S. Weather Bureau. This very extensive collection of books will be of much value to the student of climatology.

The general library of the Geological Department contains a good representation of the leading journals and works of reference upon geological subjects. It is greatly enriched by the Williams, Lewis, and Abbe libraries mentioned above. Extensive series of topographical and geological maps likewise form a portion of the library, and these are constantly increasing in number.

The library of the Maryland Geological Survey, connected with the Geological Department, already embraces an important collection of journals and proceedings of learned societies and is rapidly increasing as the result of extensive exchange.

In addition to libraries belonging to the University, the Peabody Library, rich in geological works, is available for the use of students, while books not obtainable in Baltimore may be readily consulted in the libraries of Washington.

Collections and Apparatus.—The collections of the department consist primarily of a large amount of important material brought together from Maryland and adjacent States. It represents all the horizons of the State, being especially rich in crystalline rocks and in Cretaceous and Tertiary fossils. Some of this material has been already described, while much awaits further study.

Among the most important of the special collections are the Williams, Lewis, Krantz, Hill, Stürtz, Lehmann, and Allen collections.

The apparatus includes series of models of the continents, of the State of Maryland, and the area surrounding Baltimore, as well as of special regions of geologic and topographic interest. The department is also provided with numerous photographs and lantern slides, several goniometers, a dissolving stereopticon, over a dozen microscopes of late design, an electrical machine for preparing rock-sections, a complete suite of wooden and glass crystals, together with other important pieces of apparatus for special work. The machine shop of the Maryland Geological Survey is also equipped with the latest apparatus for testing the wearing and cementing qualities of road materials. This work is carried on under the direction of Dr. Reid.

State Scientific Bureaus connected with the Geological Department.—Two scientific bureaus, established by the Legislature and maintained at the expense of the State, are carried on in connection with the Geological Department. They are the Maryland Geological and Economic Survey, and the Maryland State Weather Service. Professor Clark is in charge of both of these organizations, which are concerned with a study of the geology and physical features of the State of Maryland.

Maryland Geological Survey.—The Maryland Geological and Economic Survey was established by an act of the Legislature in March, 1896. It receives at the present time for its different departments of work the sum of $25,000 annually from the State.

Professor Clark was elected, by the Commission, State Geologist and Superintendent of the Survey, with instructions to carry out the provisions of the original and subsequent acts. Work is carried on under his direction by the instructors and students of the

department. The varied geology of Maryland and its diversified resources afford a most attractive field to the investigator.

Maryland Weather Service.—The Maryland Weather Service was organized under the joint auspices of the Johns Hopkins University, the Maryland Agricultural College, and the U. S. Weather Bureau, in May, 1891, and was recognized by the Legislature of the State in March, 1892, when provision was also made for its maintenance by the appropriation of $2,000 annually. Professor Clark has been Director of the Bureau since its organization. Observers detailed by the U. S. Weather Bureau have conducted the work. Excellent facilities are afforded the students in Geology to study the methods of weather bureau observation, and to take part in the work themselves whenever they desire to do so.

Advantages afforded by Proximity to Washington.—Washington is less than an hour distant from Baltimore. This renders it possible to take frequent advantage of the facilities afforded by that city, where the officers of the various scientific bureaus and societies give the students of the University every opportunity to examine the rich collections and libraries under their control. Special return tickets are obtainable by students for one dollar.

Geological Society of Washington.—The advanced students in Geology are members of the Geological Society of Washington, where they have the opportunity of hearing the results of the latest investigations presented by some of the leading workers in the science, and also have the chance to enter into the discussions or offer original papers of their own. The bi-weekly meetings have been frequently attended by the instructors and students of the department.

National Geographic Society.—Like opportunities are open to the advanced students of the University to become members of the National Geographic Society. As some of the most distinguished explorers and scientists lecture before this Society, unusual opportunity is presented to hear the results of their researches.

Scientific Collections and Libraries.—The scientific collections and libraries of the Smithsonian Institution, United States National Museum, and United States Geological Survey, as well as the Library of Congress, are accessible to students under certain conditions.

The Biological Sciences.

The laboratories of the University afford instruction and opportunities for research to properly qualified students in Zoölogy and Botany, in animal Physiology, in human and comparative Anatomy, and in Pathology.

ZOÖLOGY AND BOTANY.

The work in Zoölogy and Botany is directed by Dr. W. K. Brooks, Professor of Zoölogy, assisted by Dr. E. A. Andrews, Associate Professor of Biology, Dr. D. S. Johnson, Associate in Botany, Dr. B. W. Barton, Lecturer in systematic Botany, and other assistants.

Advanced Zoölogy: Professor Brooks and Associate Professor Andrews.

This course is designed for students who wish to devote themselves to zoölogy, and for those who select zoölogy as the chief subject for the degree of Doctor of Philosophy. The work, which occupies a year, is as follows:

(1). Laboratory work, throughout the year. The student is required to verify the results of certain zoölogical memoirs, which are selected in order to illustrate the application of technical methods, as well as scientific principles, and, also, to study the collateral literature. The work for 1899–1900 will be based upon the following memoirs: Weismann, Die Entstehung der Sexualzellen bei den Hydromedusen; Zeigler, Die Entwicklung von Cyclas cornea; Witlaczil, Entwickelungsgeschichte der Aphiden. After he has completed this work the student is allowed more freedom in the selection of subjects.

(2). A course of twenty lectures by Professor Brooks, weekly from January 1 to the end of the year, on the history of zoölogy. Prominence is given to the history of general principles, and selected books are also read in course. The books selected for 1899–1900 are The Cell (Wilson), and The Descent of Man (Darwin).

(3). Zoölogical Seminary: weekly throughout the year. The work of the seminary for 1899–1900 will be based upon Vol. II. of the Zoölogy of Parker and Haswell, and Hertwig's Embryology. These books will be read in course, and each student will also be required to give one or more lectures upon an assigned subject, basing them upon the general literature of the topic.

(4). Zoölogical and Botanical Journal Club: weekly throughout the year; by Professor Brooks, Associate Professor Andrews, and Associate Johnson. All graduate students, assistants, and instructors are expected to take part in the meetings of the journal club, and to report upon the current literature of assigned topics.

(5). A course of twelve lectures on Protoplasm, by Associate Professor Andrews.

General Zoölogy and Comparative Anatomy: Professor Brooks and Associate Professor Andrews.

This course is designed for those who intend to teach zoölogy, for those who look forward to advanced studies in zoölogy, for those who desire an acquaintance with the elements of zoölogy, and with comparative anatomy and embryology, as a part of a liberal education, and for those students who, having completed the minor course in biology, preliminary to medicine, desire a wider acquaintance with the animal kingdom. The work is as follows:

(1). Two afternoons of work in the laboratory, throughout the year, in systematic zoölogy and comparative anatomy and embryology. The student makes careful dissections and drawings of typical forms from most of the principal groups of the animal kingdom, and studies the systematic zoölogy of the genera and species of one group, either fishes or insects being selected for systematic study. One third of the time is devoted to the study of the embryology of vertebrates, with the embryo chick,

the frog, and the trout as types. While the chief purpose of the work in embryology is to introduce the student to some of the scientific problems of the morphology of vertebrates, the course also provides training in the collection and preservation of embryological material, in the use of hardening and staining reagents, in the preparation and preservation of serial sections for microscopic study, and the reconstruction of drawings and models from sections.

(2). Four lectures a week from the beginning of the year to the Christmas recess, on elementary zoölogy, by Professor Brooks.

(3). Four lectures a week from January 2 to the Easter recess, on elementary botany, by Dr. Johnson.

(4). Four lectures a week, from the Easter recess to the end of the year, on embryology, by Associate Professor Andrews.

Courses 1, 2, 3, and 4, with laboratory work, five hours a week through the year, constitute a "major course," and may be offered as a subsidiary subject for the degree of Doctor of Philosophy.

Introductory Course in Biology: Associate Professor Andrews and Dr. Barton.

This course, consisting of four lectures and five hours of laboratory work weekly, throughout the year, is designed as part of the general education of every college student, and is open to all candidates for the A. B. degree, as well as to special students. It is regarded as essential to all students intending to take up the study of medicine, or to follow any line of applied biology, and it (or an equivalent) is required for entrance to the Medical School. This course may be taken without previous courses in physics and chemistry, but preparatory training of this character is strongly recommended. It is chiefly a laboratory course of two afternoons a week throughout the year, supplemented by four hours a week of lectures, recitations, and exercises designed to emphasize the more essential truths of biology. In the laboratory, each student studies with the microscope, or dissects, selected plants and animals, from the simpler, such as amoeba and yeast, to the complex, such as the fern, the frog, the flowering-plant, and the rat. He also studies the elements of systematic botany. This course may be offered as a subsidiary subject for the degree of Doctor of Philosophy.

BOTANY.

Advanced Botany: Dr. Johnson.

(1). Morphology of Plants. Two lectures and two laboratory exercises a week, throughout the year. A course in the comparative morphology and the classification of the vegetable kingdom, with especial reference to reproduction.

(2). Physiology and Histology of Plants. Two exercises a week, throughout the year. The course is an outline of vegetable physiology and histology.

(3). Botanical Seminary, weekly through the year. Goebel's "Organographie der Pflanzen" will form the basis for the work of the seminary for 1899–1900.

Courses 1, 2, and 3, may be offered as a subsidiary subject for the degree of Doctor of Philosophy.

Elementary Botany: Dr. Johnson.

Four lectures a week, from January 2 to the Easter recess, on Elementary Botany, for those who look forward to advanced work in botany, and those who desire an acquaintance with the elements of botany, as a part of a liberal education.

Students in Botany have access to the extensive herbarium and valuable library of Captain J. Donnell Smith, the Schimper herbarium, the Fitzgerald collection of mosses, the local collections of the Naturalists' Field Club, and the collection of Cryptogams of the late Dr. Humphrey.

The studies which are carried on in the biological laboratory are supplemented by work at the Marine Station, which is established, from time to time, at suitable points upon the sea-shore.

One of the ordinary fellowships in the University is usually awarded, each year, to a graduate student in zoölogy, and, in the selection of the Bruce Fellow, preference is given to those who have held ordinary fellowships in zoölogy.

One of the graduate students in zoölogy may be appointed each year to occupy, during the summer months, the university table at the laboratory of the United States Fish Commission at Wood's Holl.

Whenever researches, or parts of researches, which have been carried on in the laboratory, are completed and ready for publication, the University Circulars provide for the prompt publication of abstracts of the results.

Students looking forward to the degree of Doctor of Philosophy may offer zoölogy as a principal or as a subsidiary subject, but if they have not already pursued studies equivalent to the undergraduate courses in this laboratory, they will be required to take these courses. Those who make zoölogy their principal subject, may select, as subordinates, any two of these subjects, viz., animal physiology, botany, chemistry, geology, physics,—or any other approved combination.

PHYSIOLOGY.

The work in Physiology is directed by Professor W. H. Howell, assisted by Dr. G. P. Dreyer, Associate. The laboratory is contained in the Medical School building adjoining the Hospital, and is well equipped with facilities for demonstrations and special investigations. A course of lectures covering the general and special physiology of the animal body is given each year and is illustrated by a large number of class demonstrations. In connection with this series of lectures, a laboratory course in experimental physiology is offered, extending over a period of twelve weeks and giving the student an introduction to the methods of laboratory technique. A duplicate course, consisting of lectures and laboratory work, has been arranged especially to suit the convenience of graduate students in the Philosophical Department. This course is given in the afternoons from January to June. The general courses of lectures are supplemented by advanced lectures given from time to time upon selected topics; by the work of the physiological seminary, which meets at stated intervals for the special study of certain parts of physiology; and by a weekly journal club intended for the presentation and discussion of the material contained in the current periodicals. The details of these courses are given in the programme published each year in the University Circulars.

In addition to the physiological literature contained in the library belonging to the laboratory, publications upon physiology

and the related scientific branches of medicine may be obtained conveniently from the libraries of the Medical School, the Medical and Chirurgical Faculty of Maryland, and the Surgeon General's office in Washington.

Students looking forward to the degree of Doctor of Philosophy may offer Animal Physiology as a principal or as a subordinate subject. Those who take physiology as a principal subject must present evidence of previous training in physics equivalent to the minor undergraduate course in this University, in chemistry equivalent to the minor and major undergraduate courses, and in biology equivalent to the minor and major undergraduate courses. No preliminary requirements are made for those offering Physiology as a subordinate subject.

The laboratory is open also to special students, graduates in medicine and others, who may wish to undertake laboratory investigations, or who desire to become acquainted with the use of physiological apparatus and the methods of demonstration and research.

ANATOMY.

The work in this department is in charge of Dr. Franklin P. Mall, Professor of Anatomy, with the coöperation of Dr Lewellys F. Barker, Associate Professor of Anatomy, Dr. Ross G. Harrison, Associate in Anatomy, Dr. J. Williams Lord, Instructor in Anatomy, and Dr. Charles R. Bardeen, Assistant in Anatomy.

Courses of instruction are provided in the various anatomical sciences—systematic human anatomy, histology, microscopic anatomy, and embryology,—and opportunities are afforded for advanced work and original investigation in these sciences.

The systematic courses of instruction are given in two parallel courses from October 1 to March 15. The first of these courses includes histology, microscopic anatomy, and neurology; the second embraces the subject of gross systematic human anatomy. These courses are designed for the medical students of the university, but are open to other students who are properly qualified. A more detailed description will be found in the announcement of the Medical School.

The Anatomical Laboratory is a large building, three stories high, having been constructed especially for the teaching of anatomy and for investigation in this subject. The modern machines and apparatus likely to be needed have been provided. Rooms and apparatus for animal experimentation, mechanisms of convenience for drawing and reconstruction, projection apparatus, photomicrographic outfit, and apparatus for work at low temperatures are at hand. A large collection of serial sections through human and animal embryos of different ages is available in connection with research in human embryology, and sets of serial sections, coronal, horizontal and sagittal, through the human rhombencephalon and cerebrum may be used by investigators in neurology. Facilities are afforded for the artistic illustration and publication of the results of researches leading to discoveries of importance. Every encouragement is given to suitably trained individuals who desire to undertake original investigation, either under direction or independently.

PATHOLOGY.

The Pathological Laboratory is a building of four stories on the grounds of the Johns Hopkins Hospital, with which it is connected. The autopsy theatre is in this building, which includes also rooms for pathological histology, bacteriology, experimental pathology, and private work. The museum contains a useful collection of morbid specimens.

The library of the Johns Hopkins Hospital, close to the laboratory, contains a large number of books of reference and receives regularly the chief medical and pathological journals.

Facilities are afforded for elementary and advanced study in general and special pathological anatomy, general pathology, and bacteriology. The instruction in pathology is given by Professor Welch, and Drs. Harris and MacCallum.

The instruction in Pathology for matriculates in the Medical School continues throughout the second year of the regular medical course. It includes general pathology, gross morbid anatomy, pathological histology, and the technique of post-mortem examinations. The laboratory work occupies three half-days a week.

A course in Pathological Histology for physicians is given during the months of May and June. This course presupposes on the part of the student a knowledge of normal histology. In connection with the course, demonstrations of fresh pathological specimens are made and opportunity is afforded to become familiar with the method of making post-mortem examinations. After the study of inflammation, the pathological histology of the different tissues and organs of the body is taken up in regular order. Microscopical sections are given to be stained, mounted, and carefully studied and drawn. The student is encouraged to do as much independent work as his time will permit.

The instruction in Bacteriology is given by Professor Welch, Dr. Harris, and other assistants. In addition to the course for matriculates in the medical department, courses in this subject are given to physicians in May and June. Students are taught the preparation of culture-media, the principles of disinfection and sterilization, methods of cultivating, staining, and studying bacteria, particularly those of a pathogenic nature, and the biological examination of the air, water, and soil. This department is fully supplied with the requisite apparatus and cultures for bacteriological work.

In addition to the regular courses for medical students and physicians, opportunity is afforded for advanced work and special research in pathology and bacteriology. For these purposes the Pathological Laboratory is well equipped with the necessary apparatus and material. Special subjects for research will be assigned to those who wish and are prepared to undertake original investigation.

Instruction in Clinical Microscopy is given to physicians, during May and June, in the Clinical Laboratory.

The Pathological Laboratory being upon the same grounds with the Johns Hopkins Hospital and Dispensary, the opportunities are convenient and readily accessible for combining clinical studies with the work in pathology.

Three associations, the Hospital Medical Society, the Historical Club, and the Journal Club, meet in the assembly room of the Hospital, one each Monday evening. The libraries of the University and the Hospital are supplied with a large collection of medical books and periodicals, which are accessible to the student.

The Johns Hopkins Hospital Bulletin, issued monthly, and the Johns Hopkins Hospital Reports, contain the proceedings of the Hospital societies, articles by the medical staff, and the results of researches conducted in the Hospital and the medical laboratories.

The Journal of Experimental Medicine, now in its fourth volume, under the editorial direction of Professor Welch, also contains reports of researches carried on in the physiological and pathological laboratories here and elsewhere.

Drawing.

The instruction in drawing is arranged to give the students a general knowledge of the subject, as far as the time at command will permit, while those who show particular aptitude are encouraged to follow special courses. The instruction is given by Mr. S. E. Whiteman.

Undergraduates take up the subject as one of their required studies, unless they can show a fair degree of proficiency attained elsewhere. Graduate and special students are allowed the privilege of receiving such instruction as may be most helpful to them in their respective fields of work. Those who look forward to scientific pursuits, especially those who study natural history, physics, applied mathematics and mechanics, find these courses of great value.

The Undergraduate Course is designed to form part of the general education of the student. It aims to impart such knowledge of the principles of drawing, with extended practice in the application of the same, as shall best serve to educate the eye and to train the hand,—the one to see correctly, and the other to express accurately the appearance of forms. The course includes freehand and mechanical drawing. Students may have the option of freehand drawing alone throughout the year, and drawings made in the course in systematic botany may be accepted as an equivalent for the work of the last twelve weeks of the course in freehand drawing. In the freehand drawing, the student is at once set to

draw from models, beginning with elementary forms, and proceeding through a series of exercises till he is able to produce a fair drawing of any simple object or group of objects, in outline and in light and shade. The chief instruments used are charcoal and crayon. The use of drawing instruments is taught, and the constructive processes are applied which are in general use in instrumental drawing. The elements of descriptive geometry are afterwards taken up in this course, and the fundamental principles of orthographic, scenographic, and isometric projections are worked out and applied in carefully executed drawings, finished in ink. Precision and fidelity are insisted on and no careless work is allowed, nor is any copying permitted. Each student receives the personal attention and guidance of the instructor. With the exactness of pen-and-ink work on the one hand and the freedom of charcoal on the other, the student attains a power of graphic expression which will be of service to him in almost any pursuit. The instruction in mechanical drawing will be found of great value to students who are looking forward to courses in engineering or applied science.

The Special Instruction in drawing is necessarily of such a nature as is best adapted to the requirements of the individual student: freehand drawing from natural forms, in charcoal and in water color; from plaster casts, in charcoal and crayon; advanced work in descriptive geometry. This special instruction includes work for students preparing for the courses in Medicine and Biology, but of a character more directly applied to these studies, with a view to illustrating the work of these courses.

Public Speaking and Class Debate.

Undergraduate students in their first year are trained in the art of public speaking and public reading, and this training is continued throughout the second and third years of the college course. The art of debate and extemporaneous speaking is practiced in a so-called College Congress, in which instruction is given in parliamentary law, under the direction of a member of the University staff, who guides the students in the collection of

materials for debate and in the preparation of briefs. Special facilities are offered by the historical department for the use of documents, pamphlets, and newspaper articles. Opportunity is offered to graduate students for instruction and practice in extemporaneous speaking and public lecturing.

Physical Culture.

A careful examination of each undergraduate is made by the instructor, and such exercises are prescribed as are most suitable to his needs. Systematic exercise is required of all undergraduates during their first year of residence; in subsequent years this is not compulsory. The use of the gymnasium is optional in the case of graduate students.

The Gymnasium is a new building, 127 feet long by 35 feet wide, and is provided with convenient lockers, baths, etc., as well as with the newest forms of apparatus. Adjoining the gymnasium proper is a "Cage,"—an enclosed and covered space for practice in running and in athletic sports,—127 feet long, 66 feet wide, and 30 feet high.

In addition to the training given by the instructor in Physical Culture and his assistants, instruction is provided, without extra charge, in fencing, wrestling, and boxing.

THE DEGREE OF DOCTOR OF PHILOSOPHY.

REGULATIONS.

[Adopted by the Board of University Studies, February 26, 1898.]

The degree of Doctor of Philosophy is offered to students who have followed advanced courses of university study for a period of not less than three years, under suitable guidance and favorable conditions, and who have submitted an acceptable dissertation and passed the prescribed examinations.

In order to be accepted by the Board of University Studies as a candidate for the degree of Doctor of Philosophy, the student must give evidence that he has completed such a liberal undergraduate course of academic study antecedent to the baccalaureate degree as is offered by colleges of good standing.

He must then follow advanced studies in the departments of knowledge which he may have chosen, and these studies must be pursued without serious distractions, under qualified teachers, for a period of at least three years. Private study, or study pursued at a distance from libraries and laboratories and other facilities, will not be considered as equivalent to university study.

The Board reserves the right to decide in each case whether the antecedent training has been satisfactory, and, if any of the years of advanced work have been passed by the candidate away from this university, whether they may be rightly regarded as spent in university studies under suitable guidance and favorable conditions.

In order that students may receive the definite counsel of the proper authorities with respect to their future course, they are advised to offer themselves as "candidates" for this degree as soon as their purposes are formed. At least one academic year must be passed in this university, and in every case the year immediately preceding the final examinations.*

* In case a student has complied with all the conditions and has practically completed his preparation for the final examinations, and is prevented by good reason from presenting himself, he should ask the Board to appoint a later day for his examination.

Correspondence on the foregoing matters should be addressed to the Registrar of the University.

Requirements for the Degree.

Every candidate for the degree of Doctor of Philosophy must select one principal and two subordinate subjects, the combination to be approved by the Board of University Studies. These must be pursued without serious distraction and under the general direction of the Professor in the principal subject of study, who is the official adviser of the candidate. The student must prepare a satisfactory dissertation, and must pass with credit certain written and oral examinations in his chosen departments of study.

Acceptance of the Candidate.

A student wishing to be considered a candidate for the degree must make formal application to the Board of University Studies to be enrolled, and must be accepted by the Board at least an academic year* in advance of the time he expects to present himself for examination in his principal subject. A blank form is provided for the purpose. After filling out this form, the student must present himself before the examiners in French and German at one of the stated examinations in these subjects. When their certificates are affixed to his application, he is to obtain the signatures of approval of the Professors in the departments concerned. The application, thus completed, is then to be presented to the Board for its final action.

Requirements in French and German.

a. The candidate must be able to translate French and German at sight. Familiarity with journals and monographs pertaining to his principal department of study will satisfy this requirement.

b. Examinations are held in these languages at the middle and end of each academic year, at one of which times the candidate must present himself. In October, there is provided a special examination for students who were not connected with the University during the previous academic year.

* The acceptance of a candidate by the Board at its October meeting is regarded as an acceptance at the beginning of an academic year.

c. Students who have not acquired a reading knowledge of these languages before engaging in graduate study are advised to pursue a course organized for that purpose, during their first year. Absolving the class examination at the end of this course will be construed as satisfying this requirement for the degree of Doctor of Philosophy.

Requirements in the Subordinate Subjects.

The subordinate subjects are of two grades and are known respectively as the first subordinate and the second subordinate. Each of these subjects shall be followed by the candidate for a portion of his time, during at least one year of graduate study.

It is impossible to define with precision the amount of time to be devoted to the subordinate subjects. In general, however, it may be stated that the two subordinate subjects, taken together, should represent one year's work, two-thirds of this time being devoted to the first subordinate subject.

Dissertation.

a. The dissertation must be written upon a theme approved by the adviser of the candidate, and must be completed and submitted to the Board at least four weeks before the written examinations in the principal subject are held, unless the adviser recommends a later date. The dissertation must be either printed or legibly written, paged, and bound according to a prescribed form, which can be seen in the library: this copy to be placed on file and to become the property of the University.

b. The Board shall designate two or more referees, who shall present a written report on the dissertation,—said report to be filed. In the intervals between the sessions of the Board, the President shall have power to appoint the referees.

c. The candidate shall print the dissertation in full or in part, —if in part, to the extent of not less than twenty-four octavo pages,—under the supervision of his adviser, within one year of the time when the degree is conferred, and shall present one hundred and fifty copies of the work to the University. A biographical sketch of the author shall be appended to the dissertation in both its manuscript and its printed form.

d. If the dissertation has not already been printed, a deposit of $50, to insure its printing within the specified period, shall be made by the candidate at the treasurer's office before the degree is conferred. This deposit shall be returned to him when the printed copies are presented to the University.

e. If the printed copies be not presented to the University within the specified time, the Board may declare the deposit forfeited, and may apply the amount in printing such portions as the adviser deem proper.

Examinations.

a. The candidate shall be given written examinations in the principal subject, and, wherever practicable, in both subordinate subjects, and an oral examination, before the Board, in the principal and in the first subordinate subject.

b. The candidate shall be permitted to take the written examinations in both the first and second subordinates at the end of the respective years in which the courses in these subjects were completed, or whenever he is ready, at the discretion of the examiner.

c. The Professors in the several departments of study shall prepare written reports on the result of the examinations. These reports together with the questions and answers shall be laid before the Board at the oral examination and the reports filed.

d. In the written examinations no one session shall exceed five hours.

e. In the oral examinations before the Board, the time allotted to each examination shall be one hour, and three-quarters of this time shall be devoted to the principal subject.

Degree.

The names of the candidates found worthy of the degree will be submitted to the Board of Trustees, and with their approbation the degree will be publicly conferred.

COLLEGIATE INSTRUCTION.

In addition to the instruction provided for graduate students, the Johns Hopkins University makes ample provision for collegiate instruction. Its work was originally organized to meet the needs of those desiring a systematic discipline in liberal studies, as well as to furnish additional opportunities to persons who had already received a college training. The courses offered to undergraduates are maintained with no less care and thoroughness than those intended for advanced students; the oldest and most experienced members of the academic staff coöperate in the conduct of them. No small part of the influence and usefulness of the University is in connection with the collegiate classes, in which, since 1876, more than thirteen hundred students have been enrolled.

Certain features of organization and administration have contributed to the effectiveness of the undergraduate work. The scrupulous observance of the distinction between the disciplinary methods appropriate to college teaching and the freer methods of advanced instruction; the "group" arrangement of studies, combining a reasonable liberty of choice with a sufficient exercise of authority; the facilities afforded young men of superior capacity for carrying their studies beyond the requirements of graduation; the influence upon younger pupils of the presence of a large body of graduate scholars conducting investigations in all the great departments of learning:—these conditions have proved favorable to the development of earnestness and scholarly devotion.

ARRANGEMENT OF COURSES.

The courses of study open to undergraduates are arranged in (a) the curriculum prescribed for candidates for matriculation; (b) the several "groups" offered to matriculated students.

(a). Curriculum prescribed for Candidates for Matriculation.

The standard of matriculation maintained at the Johns Hopkins University is considerably higher than that required elsewhere. In the Baltimore City College, and in several private schools of Baltimore, young men may be prepared to pass the matriculation examination; but many are unable to secure, in the places where they reside, instruction which will fit them to meet the requirements here exacted. As a consequence, many students who have desired to enter the University have been unable to do so, and some who have entered have done so only under the embarrassment and vexation of "conditions." In order to meet this difficulty, terms of admission are now designated (see page 167), corresponding to the terms of admission to other colleges of established reputation, and students who satisfy these requirements are admitted to a prescribed course of study adapted to prepare them, at the end of a year, for full matriculation.

The course of study prescribed for these students is as follows:—

1. Mathematics. *Four hours weekly.*
   Algebra (special topics).
   Solid Geometry.
   Plane Trigonometry.
   Analytic Geometry (straight line and loci).

2. Latin. *Three hours weekly.*
   Cicero, *De Senectute.*
   Sallust, *Catiline.*
   Ovid, *Heroides.*
   Vergil, *Georgics* (selections).
   Sight Reading and Prose Composition.

3. GREEK. *Three hours weekly.*
   Homer, *Iliad*, book vi.
   Herodotus, book vii.
   Sight Reading and Prose Composition.

4. GERMAN OR FRENCH.
   (*a*) For students offering Greek. *Three hours weekly.*
   German: Thomas's *Practical German Grammar;* Super's *Elementary German Reader;* E. S. Buchheim's *Short German Plays* (Clarendon Press); Heyse, *L'Arrabbiata.*
   French: Grandgent's *Short Grammar*, and *Exercises* based on Super's *French Reader;* Super's *French Reader;* J. Verne, *L'Expédition de la Jeune-Hardie;* Thiers, *Expédition de Bonaparte en Egypte.*

After completing one of these courses, students are required to take Minor A in their groups.

   (*b*) For students not offering Greek. *Four hours weekly.*
   The minor course, Class A, in either German or French.

5. RHETORIC AND ENGLISH COMPOSITION. *Three hours weekly.*
   Principles of Rhetoric.
   Rhetorical Analysis.
   Practice in Writing.

Students taking Greek may defer this course until after matriculation.

6. FREEHAND AND MECHANICAL DRAWING.

(b). GROUPS OFFERED TO MATRICULATED STUDENTS.

After matriculation, the student is expected to follow one of several distinct and parallel courses of instruction known as "groups." These are seven in number, each comprising (1) studies common to all the groups and required of all undergraduates, (2) studies peculiar to a group, (3) optional studies. The groups are assumed to be equally honorable and difficult, and are intended to combine liberty of election on the part of the student with sufficient exercise of authority to prevent discursive and ill-considered work. Each group contains two principal studies, both of which extend through two years of instruction. These are: (1) Latin and Greek, (2) Mathematics and Physics, (3) Chemistry and Biology, (4) Geology and Biology, (5) Latin and Mathematics, (6) History and Political Science, (7) English, with German or French.

The student may follow strictly the group which he has chosen; or, under the regulations hereinafter stated (see page 160, section *b*),

he may substitute, with the approval of his adviser, other studies for two—in certain cases, for three—of the courses laid down in his group.

Students who have passed French or German as the principal subject in place of Greek for matriculation, are required to substitute for it some other subject, or to take an advanced course in one of these languages. Any undergraduate course approved by the adviser may be chosen for this purpose.

In these ways the course of study in the several groups may be modified; while those who wish to concentrate their attention in the more thorough study of a special field, will find it advantageous to accept the groups as they stand.

The optional courses in Science and Literature vary from year to year, and may be followed by the student according to his tastes and acquisitions. The arrangements of the University allow those who have capacity for more than is prescribed, to broaden their studies by attendance upon the public lectures from time to time provided; and, if time permits, they may also take longer or shorter courses not actually required of them.

Each group contains twelve courses. Eight of these are four-hour courses,—each representing four hours of class-work weekly for a year. Of the others, two—the course in Rhetoric and that in English Literature—are three-hour courses; one is an elective of two hours in the third year; and one—the course in Philosophy—occupies five hours weekly through one year. Rhetoric, English Literature, and Philosophy form a part of each group. A course in Economics and History is also included in each group. Each group contains at least one year of French and one year of German, and at least one year of attention to a scientific subject, including the performance of the work prescribed in the laboratory. The instruction in Drawing and in Vocal and Physical Culture is additional to these twelve courses.

1. *The Classical Group.*

The Classical group corresponds in the main to what has been the ordinary course of study in our colleges, the requisite mathematics having been secured before matriculation. The emphasis is laid upon Latin and Greek, each of which is studied two years.

Rhetoric, English Literature, French, German, one subject involving a year of laboratory work, Economics and History, Comparative Philology, Philosophy and an elective subject occupying two hours weekly in the third year, are also included, together with Drawing and Vocal and Physical Culture.

2. *The Mathematical-Physical Group.*

The Mathematical-Physical group substitutes two years of Mathematics and two years of Physics for Latin and Greek, adding also a year of Chemistry, the other studies being the same as in the classical group. This course affords a good basis for the subsequent study of Electricity, Engineering, Astronomy, and other subjects largely dependent on the science of Mathematics.

3. *The Chemical-Biological, or Preliminary Medical, Group.*

The Chemical-Biological group fits the student to enter at once upon the studies of the Johns Hopkins Medical School, and is also a good preparation for the study of medicine elsewhere, or for the professional study of Natural History. It provides instruction in Physics, Chemistry, and Biology, with laboratory practice. The requirements in French, German, English, History, and Philosophy are the same as in the other groups.

4. *The Geological-Biological Group.*

The Geological-Biological group furnishes a good fundamental training in the sciences, providing a year's course each in Biology, Physics, and Chemistry, and a two-years' course in Geology. It affords a broad education in scientific studies, and prepares the student both to appreciate scientific methods, and to pursue advanced courses in Geology, later, should he so desire.

5. *The Latin-Mathematical Group.*

The Latin-Mathematical group affords a good fundamental training, without the study of Greek. It differs from the classical group only in substituting Mathematics for Greek.

6. *The Historical-Political Group.*

The Historical-Political group furnishes a basis for the subsequent study of law. It omits Greek and retains but one year of Latin, providing two years of History and two years of Economic and Political Science.

7. *The Modern Language Group.*

The Modern Language group is designed for those who wish a literary training based upon the modern rather than upon the ancient languages. It substitutes for Greek two years of English, and, retaining one year of Latin, substitutes for the other an additional year of either French or German. If the student is already proficient in French or German, he may substitute a year of Spanish or Italian for one of these languages.

Detailed statements respecting the groups are given in the succeeding pages.

First Group. (*Classical*).

First Year.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Suetonius, *Augustus.*
Ovid, *Fasti* (book i).
Vergil, *Æneid* (books ix, xii).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GREEK.

CLASS WORK. (1 p. m.) *Four hours weekly.*

Isocrates, *Panegyricus.*
Lysias (vii).
Euripides (one play).
Prose Composition.

PRIVATE READING:

Xenophon, *Hellenica* (book i).
Homer, *Iliad* (books xvi, xviii).

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a.m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a.m.) *Four hours weekly.*

Catullus.
Tibullus.
Terence (one play).
Plautus (one play).
Prose Composition.

PRIVATE READING:

Propertius.
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

GREEK.

CLASS WORK. (12 m.) *Four hours weekly.*

Thucydides (book vii).
Selections from the elegiac, melic, and iambic poets.
Sophocles (one play).
Reading at sight.
Prose Composition.

PRIVATE READING:

Demosthenes, *Philippics.*
Æschylus (one play).

GERMAN. (11 a. m.) *Four hours weekly.*

Otis's *Elementary German.*
Whitney's *Grammar.*
Brandt's *German Reader.*
Von Moser, *Der Bibliothekar.*
Goethe, *Egmont.*
Prose Composition.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Historical Politics. *Two hours.*
Elements of Economics.
Applied Economics.
} *Two hours.*

ELECTIVE COURSE.† *Two hours weekly.*

FRENCH. (12 m.) *Four hours weekly.*

Whitney's *Brief Grammar;* Exercises in Grammar and Composition; Grandgent's *Exercises* based on Super's *French Reader.*
Super's *French Reader;* Dumas, *L'Evasion du Duc de Beaufort;* Mérimée, *Colomba;* Augier, *Le Gendre de M. Poirier.*

COMPARATIVE PHILOLOGY.

One hour weekly.

*If Chemistry be chosen, it should be taken in the second year, and German in the first year.

†For 1899–1900, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy or Botany, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Second Group. (*Mathematical-Physical*).

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Baumbach, *Erzählungen und Märchen.*
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
- General Chemistry.
- Laboratory Work. (*Five hours weekly.*)

MATHEMATICS. *Four hours weekly.*
- Plane Analytic Geometry.
- Differential and Integral Calculus.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

Second Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
- Elementary Mechanics.
- Sound.
- Heat.
- Electricity and Magnetism.
- Light.
- Laboratory Work. (*Three hours weekly.*)

MATHEMATICS. (9 a. m.) *Four hours weekly.*
- Determinants.
- Differential and Integral Calculus (special topics).
- Theory of Equations.
- Elements of Projective Geometry.
- Analytic Geometry of Three Dimensions.

FRENCH. (12 m.) *Four hours weekly.*
- Coppée, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche and Martin, *Moi;* Rostand, *Cyrano de Bergerac;* Béranger, *Chansons.*
- Short Outline of French Literature (XVII-XIX Centuries).
- Prose Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports in French; Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
- Historical Politics. *Two hours.*
- Elements of Economics. } *Two hours.*
- Applied Economics. }

PHYSICS. (12 m.) *Four hours class-work weekly.*
- Mechanics.
- Thermodynamics.
- Electricity and Magnetism.
- Physical Optics.
- Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.* *Two hours weekly.*

* For 1899-1900, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy or Botany, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Third Group. (*Chemical-Biological*).

First Year.

PHYSICS. (10 a. m.) *Four hours class-work weekly.*

Elementary Mechanics.
Heat.
Electricity and Magnetism.
Sound.
Light.
Laboratory Work. (*Three hours weekly.*)

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*

General Chemistry.
Laboratory Work. (*Five hours weekly.*)

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Baumbach, *Erzählungen und Märchen.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

Second Year.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*

Analytical Chemistry and Chemistry of the Metals.
Chemistry of Carbon Compounds.
Laboratory Work. (*Five hours weekly.*)

BIOLOGY. (10 a. m.) *Four hours class-work weekly.*

General Biology.
Elements of Systematic Botany.
Laboratory Work. (*Five hours weekly.*)

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

FRENCH. (12 m.) *Four hours weekly.*

Coppée, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche and Martin, *Moi;* Rostand, *Cyrano de Bergerac;* Béranger, *Chansons.*
Short Outline of French Literature (XVII–XIX Centuries).
Prose Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports in French.
Private Reading.

Third Year.

BIOLOGY. (9 a. m.) *Four hours class-work weekly.*

Elements of Zoölogy.
Elements of Botany.
Embryology.
Laboratory Work. (*Five hours weekly.*)

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Historical Politics. *Two hours.*
Elements of Economics. } *Two hours.*
Applied Economics. }

† For 1899–1900, elective courses are offered in the following subjects: Differential Equations, Astronomy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Fourth Group. (*Geological-Biological.*)

First Year.

CHEMISTRY. (9 a. m.) *Four hours class-work weekly.*
General Chemistry.
Laboratory Work. (*Five hours weekly.*)

GERMAN. (11 a. m.) *Four hours weekly.*
Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Baumbach, *Erzählungen und Märchen.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

PHYSICS. (10 a. m.) *Four hours class-work weekly.*
Elementary Mechanics.
Heat.
Electricity and Magnetism.
Sound.
Light.
Laboratory Work. (*Three hours weekly.*)

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

Second Year.

GEOLOGY. (9 a. m.) *Four hours class-work weekly.*
Physical Geology.
Outline Paleontology.
Historical Geology.
Laboratory Work. (*Three hours weekly*).
Excursions.

BIOLOGY. (10 a. m.) *Four hours class-work weekly.*
General Biology.
Elements of Botany.
Laboratory Work. (*Five hours weekly.*)

FRENCH. (12 m.) *Four hours weekly.*
Coppée, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche and Martin, *Moi;* Rostand, *Cyrano de Bergerac;* Béranger, *Chansons.*
Short Outline of French Literature (XVII-XIX Centuries.)
Prose Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports in French; Private Reading.

ENGLISH LITERATURE. *Three hours weekly.*
Outline History.
Critical Study of Important Writers.
Private Reading.

Third Year.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*
Historical Politics. *Two hours.*
Elements of Economics. } *Two hours.*
Applied Economics. }

GEOLOGY. (12 m.) *Four hours class-work weekly.*
Crystallography.
Descriptive Mineralogy.
Elementary Petrography.
Laboratory Work. (*Three hours weekly*).
Excursions.

ZOOLOGY *or* BOTANY. (Elective.)*
Two hours weekly.

*One of the following two-hour elective courses may be substituted for Zoology or Botany,—Differential Equations, Astronomy, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature.

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Fifth Group. (*Latin-Mathematical.*)

First Year.

LATIN.

CLASS WORK. (9 a.m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.

PRIVATE READING:

Cæsar, *Bellum Civile* (book i).
Suetonius, *Augustus.*
Ovid, *Fasti* (book i).
Vergil, *Æneid* (books ix, xii).

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Baumbach, *Erzählungen und Märchen.*
Composition.
Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a.m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations, and laboratory work.

Second Year.

LATIN.

CLASS WORK. (10 a.m.) *Four hours weekly.*

Catullus.
Tibullus.
Terence (one play).
Plautus (one play).
Reading at Sight.
Prose Composition.

PRIVATE READING:

Propertius.
Plautus, *Miles Gloriosus.*

ENGLISH LITERATURE. *Three hours weekly.*

Outline History.
Critical Study of Important Writers.
Private Reading.

FRENCH. (12 m.) *Four hours weekly.*

Coppée, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche and Martin, *Moi;* Rostand, *Cyrano de Bergerac;* Béranger, *Chansons.*
Short Outline of French Literature (XVII-XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports in French; Private Reading.

MATHEMATICS. *Four hours weekly.*

Plane Analytic Geometry.
Differential and Integral Calculus.

Third Year.

MATHEMATICS. (9 a. m.) *Four hours weekly.*

Determinants.
Differential and Integral Calculus (special topics).
Theory of Equations.
Elements of Projective Geometry.
Analytic Geometry of Three Dimensions.

ELECTIVE COURSE.† *Two hours weekly.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Historical Politics. *Two hours.*
Elements of Economics.
Applied Economics.
} *Two hours.*

*If Chemistry be chosen, it should be taken in the third year, and the courses in Mathematics in the first and second years.

†For 1899-1900, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy or Botany, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Sixth Group. (*Historical-Political.*)

First Year.

GERMAN. (11 a. m.) *Four hours weekly.*
- Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
- Prose Reading: Chamisso, *Peter Schlemihl;* Baumbach, *Erzählungen und Märchen.*
- Composition.
- Sight Reading.
- Private Reading: Gutzkow, *Zopf und Schwert.*

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*
- Principles of Rhetoric.
- Rhetorical Analysis.
- Practice in Writing.

ANCIENT HISTORY. (10 a. m.) *Four hours weekly.*
- Greece.
- Rome.
- Readings from Classical Historians.

LATIN.

CLASS WORK. (9 a. m.) *Four hours weekly.*
- Livy (two books).
- Horace (selections).
- History of Roman Literature.
- Sight Reading.

PRIVATE READING:
- Cæsar, *Bellum Civile* (book i).
- Suetonius, *Augustus.*
- Ovid, *Fasti* (book i).
- Vergil, *Æneid* (books ix, xii).

Second Year.

HISTORY. (11 a. m.) *Four hours weekly.*
- Civilization. *Two hours.*
- Reformation. } *Two hours.*
- France and Germany. }

ECONOMICS. (10 a. m.) *Four hours weekly.*
- Elements of Economics. } *Two hours.*
- Money; Taxation. }
- History of Economic Thought. } *Two hours.*
- Tariff; Transportation. }

ENGLISH LITERATURE. *Three hours weekly.*
- Outline History.
- Critical Study of Important Writers.
- Private Reading.

FRENCH. (12 m.) *Four hours weekly.*
- Coppée, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche and Martin, *Moi;* Rostand, *Cyrano de Bergerac;* Béranger, *Chansons.*
- Short Outline of French Literature (XVII–XIX Centuries).
- Composition and Syntax.
- Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports in French; Private Reading.

Third Year.

POLITICS. (12 m.) *Four hours weekly.*
- English Constitutional Law and History.
- American Constitutional Law and History.

PHILOSOPHY. (11 a. m.) *Five hours weekly.*
- Logic, Psychology, and Ethics.

LABORATORY COURSE. *Four hours class-work weekly.*
- Chemistry (9 a. m.), *or* } Lectures, recitations, and laboratory work.
- Physics (10 a. m.), *or* }
- Biology (10 a. m.). }

ELECTIVE COURSE.* *Two hours weekly.*

* For 1899–1900, elective courses are offered in the following subjects: Differential Equations, Astronomy, Zoölogy or Botany, Hebrew, Latin, Greek, German, French, Italian, Spanish, English Literature, History of Philosophy (one hour).

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

Seventh Group. (*Modern Languages.*)

First Year.

LATIN. (9 a. m.) *Four hours weekly.*

Livy (two books).
Horace (selections).
Prose Composition.
Private reading: Cæsar, *Bellum Civile* (book i); Suetonius, *Augustus*; Ovid, *Fasti* (book i); Vergil, *Æneid* (books ix, xii).

ENGLISH. (1 p. m.) *Four hours weekly.*

Early English Texts.
English Literature.

LABORATORY COURSE. *Four hours class-work weekly.*

Chemistry* (9 a. m.), *or*
Physics (10 a. m.), *or*
Biology (10 a. m.).
} Lectures, recitations and laboratory work.

RHETORIC AND ENGLISH COMPOSITION. (12 m.) *Three hours weekly.*

Principles of Rhetoric.
Rhetorical Analysis.
Practice in Writing.

Second Year.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Schiller, *Maria Stuart;* Goethe, *Hermann und Dorothea.*
Prose Reading: Chamisso, *Peter Schlemihl;* Baumbach, *Erzählungen und Märchen.*
Composition; Sight Reading.
Private Reading: Gutzkow, *Zopf und Schwert.*

HISTORY AND ECONOMICS. (10 a. m.) *Four hours weekly.*

Historical Politics. *Two hours.*
Elements of Economics.
Applied Economics.
} *Two hours.*

FRENCH. (12 m.) *Four hours weekly.*

Coppée, *Contes;* Mérimée, *Colomba;* Hugo, *Hernani;* Molière, *L'Avare;* Augier, *Le Gendre de M. Poirier;* Labiche and Martin, *Moi;* Rostand, *Cyrano de Bergerac;* Béranger, *Chansons.*
Short Outline of French Literature (XVII–XIX Centuries).
Composition and Syntax.
Exercises in Pronunciation, Recitation, and Conversation; Oral and Written Reports in French; Private Reading.

ELECTIVE COURSE. *Three hours weekly.*

[See foot-note, page 156.]

Third Year.

A.

FRENCH. (10 a. m.) *Four hours weekly.*

Nineteenth Century; Classical Drama.
History of French Literature.
Laws of Versification.
Composition and Idioms.
Exercises in Pronunciation, Recitation, and Conversation; French Oral and Written Reports and Essays; Private Reading.

or C.

SPANISH. (9 a. m.) *Four hours weekly.*

Manning's *Spanish Grammar;* Exercises in Composition; History of Spanish Literature.
Matzke's *Spanish Readings;* Alarcón, *El Capitán Veneno;* Galdós, *Doña Perfecta;* Tamayo, *Un Drama Nuevo.*

PHILOSOPHY. (11 a. m.) *Five hours weekly.*

Logic, Psychology, and Ethics.

ELECTIVE COURSE. *Two hours weekly.*

[See foot-note, page 156.]

or B.

GERMAN. (11 a. m.) *Four hours weekly.*

Classics: Goethe, *Faust;* Schiller, *Wallensteins Lager, Piccolomini.*
Prose Reading.
History of German Literature.
Composition and Grammar.
Private Reading; Schiller, *Wallensteins Tod.*

or D.

ITALIAN. (9 a. m.) *Four hours weekly.*

Grandgent's *Grammar* and *Composition;* main laws of versification; History of Italian Literature.
Prose readings: De Amicis, Verga, Serao, Fogazzaro.
Selected poetry of Dante, Alfieri, Goldoni, Leopardi.

ENGLISH. (12 m.) *Four hours weekly.*

Anglo-Saxon.
Early Scottish Poets.
Elizabethan Literature.
Literature of the first half of the Nineteenth Century.

*If Chemistry be chosen, it should be taken in the second year, and German in the first year.

Students who have passed French or German as the principal subject in place of Greek for matriculation, must substitute some other four-hour course.

SYNOPSIS OF GROUPS.

Group I.	Group II.	Group III.	Group IV.	Group V.	Group VI.	Group VII.
First Year.						
Latin, 9–10. Chemistry, 9–10.* or Biology or Physics } 10–11. Rhetoric, 12–1. Greek, 1–2.	Chemistry, 9–10. German, 11–12. Rhetoric, 12–1. Mathematics.	Chemistry, 9–10. Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Chemistry, 9–10. Physics, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics } 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. History, 10–11. German, 11–12. Rhetoric, 12–1.	Latin, 9–10. Chemistry, 9–10.* or Biology or Physics } 10–11. Rhetoric, 12–1. English, 1–2.
Second Year.						
Latin, 10–11. German, 11–12. Greek, 12–1. English Literature.	Mathematics, 9–10. Physics, 10–11. French, 12–1. English Literature.	Chemistry, 9–10. Biology, 10–11. French, 12–1. English Literature.	Geology, 9–10. Biology, 10–11. French, 12–1. English Literature.	Latin, 10–11. French, 12–1. Mathematics. English Literature.	Economics, 10–11. History, 11–12. French, 12–1. English Literature.	History and Economics, 10–11. German, 11–12. French, 12–1. Elective Course.
Third Year.						
History and Economics, 10–11. Philosophy, 11–12. French, 12–1. Comp. Philology. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Physics, 12–1. Elective Course.	Biology, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	History and Economics, 10–11. Philosophy, 11–12. Geology, 12–1. Zoology or Botany (*elective*).†	Mathematics, 9–10. History and Economics, 10–11. Philosophy, 11–12. Elective Course.	Chemistry, 9–10. or Physics or Biology } 10–11. Philosophy, 11–12. Political Science, 12–1. Elective Course.	Italian or Spanish } 9–10. or French, 10–11. or German, 11–12. Philosophy, 11–12. English, 12–1. Elective Course.

* See footnotes on pages 151, 155, 157.
† See footnote on page 154.

HOURS OF COLLEGE COURSES.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9	Elective Courses. Mathematics (Minor). English Literature. Mathematics (Prelim.).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian (Minor). Spanish (Minor). French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian (Minor). Spanish (Minor). French (Elements). German (Elements).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian (Minor). Spanish (Minor).	Latin (Minor). Chemistry (Minor). Chemistry (Major). Biology (Major). Mathematics (Major). Geology (Minor). Italian (Minor). Spanish (Minor). French (Elements). German (Elements).
10	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Greek (Preliminary).	Elective Courses. Mathematics (Minor). English Literature. Mathematics (Prelim.).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Latin (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Latin (Preliminary).	Physics (Minor). Biology (Minor). Latin (Major). History and Economics. History (Minor). French (Major). Political Science (Minor). Latin (Preliminary).
11	German (Major). German (Minor A). German (Minor B). Philosophy. History (Major).	German (Major). German (Minor A). German (Minor B). Philosophy. History (Major).	Mathematics (Minor). English Literature. Philosophy. Mathematics (Prelim.).	German (Major). German (Minor A). German (Minor B). Philosophy. History (Major).	German (Major). German (Minor A). German (Minor B). Philosophy. History (Major).
12	Greek (Major). French (Minor A). French Minor B). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology (Major).	Greek (Major). French (Minor A). French (Minor B). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology (Major).	Greek (Major). French (Minor A). French (Minor B). Physics (Major). Political Science (Major). English (Major). Rhetoric. Geology (Major).	Mathematics (Minor). Elective Courses. Mathematics (Prelim.). Geology (Major).	Greek (Major). French (Minor A). French (Minor B). Physics (Major). Political Science (Major). English (Major).
1	Greek (Minor). English (Minor).	Greek (Minor). English (Minor).	Greek (Minor). English (Minor).	Greek (Minor). English (Minor). Greek (Preliminary).	Elective Courses. Greek (Preliminary).

REQUISITES FOR THE DEGREE OF BACHELOR OF ARTS.

As an evidence that the collegiate course has been successfully completed, the degree of Bachelor of Arts is conferred at its close. The degree signifies, in the case of every recipient, such instruction in ancient and modern languages, in mathematics, in the physical and natural sciences, in literature, philosophy, and history, as is believed to be essential to a liberal education. The candidate must, in addition to all the requirements for admission and matriculation, absolve—

(*a*) The following prescribed courses: Rhetoric, English Literature; Economics and History; Philosophy; the minor course* in French and the minor in German; exercises in English Composition, as prescribed by the Collegiate Professor of English; Drawing; Physical and Vocal Culture.

(*b*) Five courses, each occupying four hours weekly for one year, of which at least one must be a major course, and at least one must be a laboratory course†; also an elective course, two hours weekly, during the third year.

In all cases, the candidate must pursue the last year of his undergraduate course in this institution, and must have completed his matriculation before entering upon that year, unless, for special reasons, the Board of Advisers shall have permitted a postponement of some portion of the matriculation requirements. Such special reasons must, in all ordinary cases, be submitted to the Board not later than the close of the year preceding the last; and in no case will they be considered later than October of the last year.

Each instructor files in the office, about the time of the winter and spring recesses and at the close of the year, a report of the progress of each member of his classes, deduced from daily observation, or examinations, or both. These reports are called

* A "minor course" is the first year of instruction in any subject; a "major course" is the second year of instruction.

† If the major course selected be a laboratory course, an additional laboratory course will not be required.

the Intermediate Records. Other reports (*e. g.* of private readings, or of the completion of a particular book or subject) may be made by the instructor at any time.

At the close of the year, the University holds an examination of each class on the whole year's work, known as the University Examination, the reports of which are also put on file in the office.

From the Intermediate Records and the Reports of the University Examination, the Board of Collegiate Advisers causes to be made up an average mark, on the authorized scale, for the work of the whole year, which alone determines the standing of any candidate for honors. This constitutes the Final Record.

The reports of all these examinations are carefully recorded and preserved, and the degree of Bachelor of Arts is conferred only when the records show that the prescribed amount of work has been satisfactorily completed.

Regular attendance upon the prescribed exercises is required. Satisfactory certificates must be presented from the teachers of drawing, physical training, and vocal culture. One or more of the essays which the candidate has written, copied by his own hand in a prescribed style, must be left with the Registrar, before the first of May preceding graduation, for presentation to the Board of Collegiate Advisers.

No uniform length of residence is prescribed as necessary to the attainment of the bachelor's degree. Students who fully meet, at entrance, the requirements for matriculation (see pages 164–166) and who maintain a satisfactory standing in the full work of each year, may be graduated in three years. Other students will require four years. But a young man who comes with attainments beyond what are required for matriculation, or who possesses unusual ability, may complete the work in less than three years. No one is kept back by the requirements of the ordinary class system.

ADVISERS.

Before an undergraduate student begins his academic work, the President designates one of his principal instructors to act as his Adviser. The approval of the Adviser is necessary before the student can enter upon any course of study. No instructor will receive into a class any student who does not bring with him (in a book provided for that purpose) assurance that his Adviser approves his pursuing the study at that time, and no student is allowed, without the consent of his Adviser, to discontinue any work. Each Adviser endeavors to establish relations of friendliness and confidence with the students assigned to his care; he not only gives counsel in regard to the selection of studies, but promotes the welfare of his students in every practicable way.

REQUIREMENTS FOR ADMISSION.

Those who wish to pursue undergraduate courses, are expected to appear at the regular times appointed for examination in June and October. Persons at a distance desiring information are requested to write for a blank form of "Application for Admission," which may be filled up and returned to the University. Upon its receipt, such counsel will be given as the case requires.

(*a*) Matriculated Students.

Students who fully meet, at entrance, the requirements for matriculation (as stated on pages 164–166), and who maintain a satisfactory standing in the full work of each year, may be graduated in three years.

Students who fail to meet, at entrance, the full matriculation requirements, or whose work, after admission, is unsatisfactory, will need a longer period of residence.

The matriculation examination may be divided, and a part of the subjects passed in one year and the rest a year later, according to the regulations prescribed below (see page 167).

When a school, approved by the Academic Council, shall certify that a candidate has satisfactorily completed *all the studies requisite for matriculation*, such candidate will be exempted from examination, except in the following subjects: Trigonometry, Analytic Geometry, Cicero or Vergil (as the candidate may prefer), Latin Prose Composition, Homer or Herodotus (as the candidate may prefer), Greek Prose Composition, the minor courses in French and German, English, and Science. The examination in these subjects may be divided between June and October of the same year, but, except in the case of English, not between successive years.

(*b*) Candidates for Matriculation.

The matriculation examination may be passed, at entrance, by those who have completed the courses now offered in several preparatory schools of Baltimore. Persons taught elsewhere are often unable to obtain instruction in all the subjects requisite for matriculation. To meet the needs of such students, terms of admission are offered (as described on page 167), corresponding to the terms of admission to other colleges of established reputation. Students who satisfy these requirements, may be admitted to the course of study stated on pages 146, 147. In the case of such persons, a residence of four years will be necessary to the attainment of the degree of Bachelor of Arts.

(*c*) Special Students.

The University discourages from entering as special students those who are not qualified, by age, character, attainments, and habits of study, to attend its classes and lectures with profit to themselves and credit to the institution. The authorities are, however, ready to receive, as special students, properly qualified persons who have some good reason for not pursuing the full course. A special examination is arranged for such persons (see page 168). Many excellent students have been thus enrolled, among whom not a few have subsequently changed their plans, passed the matriculation examination, and at length received the degree of Bachelor of Arts. The privilege once accorded will be forfeited at any time, if the student is found unworthy of it.

Requirements for Matriculation.

1. *Mathematics.*—Algebra; Plane and Solid Geometry; Plane Trigonometry; Analytic Geometry. A competent knowledge of Arithmetic (including the metric system) is assumed.

The requirements in Algebra include the following subjects:

(*A*). The fundamental rules, use of parentheses, factoring, greatest common divisor, least common multiple, equations of the first degree in one or more unknown quantities, and problems leading to such equations, fractions, inequalities, involution and evolution, theory of exponents, radicals, imaginaries, quadratic equations and problems leading to quadratics.

(*B*). Equations solved like quadratics, simultaneous quadratic equations, theory of quadratic equations, ratio and proportion, the progressions, the binomial theorem, logarithms, permutations and combinations.

The subjects required in Plane and Solid Geometry and in Trigonometry are those treated in the ordinary text-books.

The subjects required in Analytic Geometry are the straight line in rectangular coördinates, transformation of coördinates, loci, and plotting of curves.

Substitution: Students selecting groups which do not include Minor Mathematics or Major Physics, may, in case they offer Greek for matriculation, substitute for Analytic Geometry the *elements* of either French or German (4*b* or 5*b*, page 165).

2. *Latin.*—Cæsar, *Gallic War*, books i–v; Vergil, *Eclogues* and *Aeneid*, books i–vi; Ovid (Allen and Greenough's Ovid, pp. 1–74, 176–195, or Kelsey's); Cicero, the four orations against Catiline, *de imperio Pompeii*, *pro Archia*, and *in Verrem*, *actio I;* translation of easy English prose into Latin.

Substitution: Sallust's *Catiline* may be substituted for the fifth book of Cæsar, and Cicero's *de Senectute* for the *de imperio Pompeii.*

The examination will test the power of exact and idiomatic translation, the knowledge of forms, of syntax, and of prosody. In certain cases a candidate may be allowed to take an oral instead of a written examination. If, for instance, he has not been prepared on the books above prescribed, but has read about the same amount in other books, he may be examined on these.

3. *Greek.*—Xenophon, *Anabasis*, books i–iv; Homer, *Iliad*, books i–iv; Herodotus, book vii; translation of easy English prose into Greek.

Candidates will be expected to show an accurate knowledge of forms, and an acquaintance with the common rules of syntax and accent, and with the prosody of the Homeric poems.

In case any candidate has made his preparation by the study of books other than those named above, or for any reason believes that an oral examination would be for his advantage, he may be examined upon easy passages previously unseen; if he acquits himself well, he will be required to put on paper only the passage given to be translated into Greek prose.

4, 5. *German and French.*—Candidates not offering Greek must offer one of the following combinations. In one of these languages the elements are

required; in the other, an amount of knowledge equal to that represented by the minor or first year's collegiate course:

4.

(*a*) *German.*

Edgren and Fossler, *A brief German Grammar.*

E. S. Joynes, *German Reader*, pp. 23–47, 85–128.

Schiller, *Wilhelm Tell*, (Clarendon Press, large edition).

Goethe, *Egmont* (ed. Buchheim).

Lessing, *Minna von Barnhelm* (Clarendon Press).

Heine, *Harzreise* (Clarendon Press).

Freytag, *Der Staat Friedrichs des Grossen* (ed. W. Wagner, Pitt Press).

Prose Composition (Whitney's *Grammar*, Exercises, 2d Series).

(*b*) *French.*

Whitney's *Grammar, Part I.*

Super's *French Reader, Parts II, III, IV;* J. Verne, *Michel Strogoff* (ed. Lewis).

5.

(*a*) *French.*

Whitney's *Grammar, Parts I and II*, substituting for the exercises of *Part II*, "*Materials for French Composition, Part I*, based on Halévy's *L'Abbé Constantin*" (ed. Grandgent; Heath & Co.).

Super's *French Reader, Parts II, III, IV;* J. Verne, *Michel Strogoff* (ed. Lewis); Mérimée, *Colomba;* Daudet, *Contes* (ed. Cameron).

Molière, *L'Avare;* Hugo, *Hernani* (ed. Matzke); Augier, *Le Gendre de M. Poirier;* Sandeau, *Mlle de la Seiglière* (ed. Warren).

(*b*) *German.*

Edgren and Fossler, *A brief German Grammar.*

E. S. Joynes, *German Reader*, pp. 23–47, 85–128.

von Wildenbruch, *Das edle Blut* (ed. Schmidt).

The amount of German and French accepted as a substitute for Greek at matriculation may not count also as a part of the work required for graduation.

Reading at Sight. The language papers, both ancient and modern, will contain one passage, or more, of moderate difficulty, not included in the prescribed lists. A good handling of passages previously unseen will go far toward compensating for deficiencies in the formal requirements. This does not apply, however, to the examination in the *elements* of French and German.

6. *English.*—The examination will consist of two parts:

I. *Reading.* The candidate will be required to write a paragraph or two on each of several topics chosen by him from a considerable number—perhaps ten or fifteen—set before him in the examination paper. This part of the examination is designed, primarily, to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. As additional evidence of preparation, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work.

The books set for this part of the examination will be:—

In 1899: Dryden's *Palamon and Arcite;* Pope's *Iliad*, Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *Ancient Mariner;* De Quincey's *The Flight of a Tartar Tribe;* Cooper's *The Last of the Mohicans;* Lowell's *Vision of Sir Launfal;* Hawthorne's *The House of the Seven Gables.*

In 1900: Dryden's *Palamon and Arcite;* Pope's *Iliad*, Books I, VI, XXII, XXIV; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Scott's *Ivanhoe;* De Quincey's *The Flight of a Tartar Tribe;* Cooper's *The Last of the Mohicans;* Tennyson's *The Princess;* Lowell's *Vision of Sir Launfal.*.

In 1901 and in 1902: Shakespeare's *The Merchant of Venice;* Pope's *Iliad*, Books I, VI, XXII, and XXIV; *The Sir Roger de Coverley Papers* in *The Spectator;* Goldsmith's *The Vicar of Wakefield;* Coleridge's *Ancient Mariner;* Scott's *Ivanhoe;* Cooper's *The Last of the Mohicans;* Tennyson's *The Princess;* Lowell's *Vision of Sir Launfal;* George Eliot's *Silas Marner.*

II. *Study and Practice.* This part of the examination presupposes the careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy.

The books set for this part of the examination will be:—

In 1899: Shakespeare's *Macbeth;* Milton's *Paradise Lost*, Books I and II; Burke's *Speech on Conciliation with America;* Carlyle's *Essay on Burns.*

In 1900: Shakespeare's *Macbeth;* Milton's *Paradise Lost*, Books I and II; Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

In 1901 and in 1902: Shakespeare's *Macbeth;* Milton's *L'Allegro*, *Il Penseroso*, *Comus*, and *Lycidas;* Burke's *Speech on Conciliation with America;* Macaulay's *Essays on Milton and Addison.*

The reading and study of the works named above is recommended to all candidates; equivalents will, however, be accepted, provided that the amount of reading be about equally divided between prose and verse.

In connection with the reading and study of the required books, parallel or subsidiary reading should be encouraged, and a considerable amount of English poetry should be memorized. The essentials of English Grammar should not be neglected in preparatory study.

Note.—No candidate will be accepted in English whose work is notably defective in point of spelling, punctuation, idiom, or division into paragraphs.

Although candidates will be permitted to take the entire examination at entrance, it is strongly recommended that Part I be taken as a preliminary examination, and Part II as a final examination. Candidates will thus have an opportunity to make up deficiencies which may be discovered at the preliminary examination, and to enter the University without a condition in English.

7. *History.*—The outlines of the History of England and the United States, or of the History of Greece and Rome, and the outlines of Geography.

8. *Science.*—The elements of Chemistry, Botany, or Physical Geography.

The examination is intended to determine whether the candidate has a knowledge of the elementary facts of one of these sciences, based on practical study. Those who take the examination in Chemistry will be examined in Remsen's "Elements of Chemistry," and will be required to have performed the experiments described in Remsen's "Laboratory Manual," and to present their laboratory note-books for examination. The requirements in Botany include a knowledge of the structure of plants, such as may be obtained from a study of Spaulding's "Introduction to Botany," excluding the microscopic work, and the ability to use Gray's Manual in determining the species of flowering plants. The examination will be mainly practical. In order to absolve the requirements in Physical Geography, the student must pass an examination on Davis's "Physical Geography," or Tarr's "Elementary Physical Geography."

Division of the Matriculation Examination.

A student may pass a part of the matriculation examination one year before his admission to the University, and receive credit for the same under the following conditions:

In his application he must distinctly declare his intention to divide the examination. The subjects thus passed will not count towards matriculation, unless the candidate completes his matriculation the following year. The first part of the divided examination will be confined to the following subjects, of which the candidate will be expected to pass in English (part I), Algebra, one Latin author, and three of the remaining subjects:*

English (Part I).
Algebra (A). (See page 164).
Plane Geometry.
Cæsar, *Gallic War*, books i–v.
Vergil, *Aeneid*, books i–vi.
Xenophon, or French, or German. (See statement below).
History of the United States or of Greece.
History of England or of Rome.
Science.

If French or German is offered in place of Xenophon, the candidate will be examined as follows:

In *German:* Edgren and Fossler, *A brief German Grammar;* E. S. Joynes, *German Reader*, pp. 23–47, 85–128; Schiller's *Wilhelm Tell;* Prose Composition, sentences of moderate difficulty to be translated into German at sight.

Or in *French:* Whitney's *Grammar, Part I*, with the exercises; Super's *French Reader, Parts II, III, IV;* Mérimée, Sandeau, J. Verne, Augier, Daudet—(as on page 165); Prose Composition, sentences of moderate difficulty to be translated into French at sight.

The whole of the above amounts must be offered.

Requirements for Admission as a Candidate for Matriculation.

1. *Mathematics.*—Algebra (A and B); Plane Geometry (as for matriculation.) A competent knowledge of Arithmetic (including the metric system) is assumed.

* Schools approved by the Academic Council, according to the plan described on page 163, may recommend for examination in English (part I), and in Science, candidates who do not wish to attempt the other subjects required in the first part of the divided examination.

2. *Latin.*—Cæsar, *Gallic War*, books i–iv; Vergil, *Aeneid*, books i–vi; Cicero, four orations against Catiline, *de imperio Pompeii*, *pro Archia;* Ovid, 1000 lines (Allen and Greenough's Ovid, pp. 1–33, 176–180, or Kelsey's; translation of easy English prose into Latin.
3. *Greek.*—Xenophon, *Anabasis*, books i-iv; Homer, *Iliad*, books i-iii; translation of easy English sentences into Greek.
4. *German* and *French* (in substitution for *Greek*):
   German.—Edgren and Fossler, *A brief German Grammar;* E. S. Joynes, *German Reader*, pp. 23–47, 85–128; von Wildenbruch, *Das edle Blut* (ed. Schmidt).
   French.—Whitney's *Grammar*, *Part I;* Super's *French Reader*, *Parts II, III, IV;* J. Verne, *Michel Strogoff* (ed. Lewis).
5. *English,*—(as for matriculation).
6. *History,*—(as for matriculation).
7. *Science,*—(as for matriculation).

Requirements for Admission as a Special Student.

Before an undergraduate is admitted as a special student, he will be required, unless expressly excused for definite reasons, to pass examinations in the following subjects:

1. *Mathematics.*—Algebra; Plane and Solid Geometry. (As for matriculation.) A competent knowledge of Arithmetic (including the metric system) is assumed.
2. *Latin.*—Cæsar, *Gallic War*, books i–iv; Cicero, six orations; Vergil, *Aeneid*, books i–vi, and *Eclogues.*

Substitution: Students who wish to pursue studies other than linguistic or historical, may substitute for the requirement in Latin the full amount of Mathematics requisite for matriculation (page 164).

3. *Greek.*—Xenophon, *Anabasis*, books i–iv; Homer, *Iliad*, books i, ii.

Substitution: Students who do not offer Greek, will be examined in French or German as specified under "Division of the Matriculation Examination" (page 167), and in the History of Greece and Rome.

4. *English,*—(as for matriculation).
5. *United States History,*—(as for matriculation).
6. *Science,*—(as for matriculation).

Changes are under way respecting the course in Applied Electricity. Inquiries may be addressed to the Registrar of the University.

THE JOHNS HOPKINS MEDICAL SCHOOL.

Detailed statements as to the courses of instruction and other information are given in the Annual Announcement of the Johns Hopkins Medical School, which will be sent upon application to the Registrar of the University.

TERMS OF ADMISSION.

The medical department of this university is planned for the professional education of those students who have been especially fitted to receive its instruction by a course of preliminary training in the liberal arts, and especially in those branches of science, like physics, chemistry, and biology, which underlie the medical sciences. Men and women are admitted upon the same terms.

As candidates for the degree of Doctor of Medicine the school receives:

1. Those who have satisfactorily completed the Chemical-Biological course which leads to the A. B. degree in this university.

2. Graduates of approved colleges or scientific schools who can furnish evidence: (*a*) That they have acquaintance with Latin and a good reading knowledge of French and German; (*b*) That they have such knowledge of physics, chemistry, and biology as is imparted by the regular minor courses given in these subjects in this university.

The phrase "a minor course," as here employed, means a course that requires a year for its completion. In physics, four class-room exercises and three hours a week in the laboratory are required; in chemistry and biology four class-room exercises and five hours a week in the laboratory, in each subject.

Many inquiries have been received regarding the character and amount of the requisite training indicated by the term "Minor Course" in these sciences. In explanation, it may be stated, with respect to Biology, that the candidates should have followed for at least a year a laboratory course in the structure, life history, and vital activities of selected types of animal and vegetable life. In the Chemical-Biological course for undergraduates in

this university, the laboratory work in biology at present includes the study of such types as amœba, hæmatococcus, yeast, penicillium, bacteria, mushroom, hydra, vorticella, a fern, a flowering plant, the earthworm, lobster, anodon; the gross and minute anatomy of the frog, the development of its eggs, the structure, formation, and metamorphoses of the tadpole; the study and drawing of the bones in the human skeleton; the comparison of some parts of related vertebrate skeletons; dissection of a mammal; the field and laboratory study of some few flowering plants. The laboratory work is the more important part, the lectures and other exercises subsidiary. It is, of course, not to be understood that this curriculum of biological work must be rigidly followed. Equivalent work will be accepted.

The candidate should have followed a course in general Chemistry for at least a year. This course should include laboratory work, about five hours a week through the year, and lectures and class-room work covering the outlines of inorganic chemistry and the elements of organic chemistry. A good knowledge of the subject as presented in Remsen's "Introduction to the Study of Chemistry" may be regarded as the minimum requirement. A fuller knowledge of Chemistry is, of course, desirable.

In Physics, the candidate should have followed a collegiate course for at least one year. This should include four hours a week of class-room work and at least three hours a week of quantitative work in the laboratory. Special attention should be given to theoretical mechanics and to the mechanical and electrical experiments.

3. Those who give evidence by examination that they possess the general education implied by a degree in arts or in science from an approved college or scientific school, and the knowledge of French, German, Latin, physics, chemistry, and biology above indicated.

Applicants for admission will receive blanks to be filled out relating to their previous courses of study.

They are required to furnish certificates from officers of the colleges or scientific schools where they have studied, as to the courses pursued in physics, chemistry, and biology. If such certificates are satisfactory, no examination in these subjects will be required from those who possess a degree in arts or in science from an approved college or scientific school.

Candidates who have not received a degree in arts or in science from an approved college or scientific school, will be required (1) to pass, at the beginning of the session in October, the matriculation examination for admission to the collegiate department of the

Johns Hopkins University; (2) then to pass examinations equivalent to those taken by students completing the Chemical-Biological course which leads to the A. B. degree in this University; and (3) to furnish satisfactory certificates that they have had the requisite laboratory training as specified above. It is expected that only in very rare instances will applicants who do not possess a degree in arts or in science, be able to meet these requirements for admission.

Hearers and special workers, not candidates for a degree, will be received at the discretion of the Faculty.

Admission to Advanced Standing.

Applicants for admission to advanced standing must furnish evidence (1) that the foregoing terms of admission as regards preliminary training have been fulfilled, (2) that courses equivalent in kind and amount to those given here, preceding that year of the course for admission to which application is made, have been satisfactorily completed, and (3) must pass examinations, at the beginning of the session in October, in all the subjects that have been already pursued by the class to which admission is sought. Certificates of standing elsewhere cannot be accepted in place of these examinations.

GENERAL PLAN OF INSTRUCTION.

The course of instruction is planned for those who have received a liberal education and the training in physics, chemistry, and general biology which has been specified. The required period of study for the degree of Doctor of Medicine is four years. The academic year begins on the first of October and ends about the middle of June. There are short recesses at Christmas and Easter.

The first two years of the course are devoted mainly to the fundamental medical sciences, a large part of the time being spent in practical work in the laboratories. In the latter two years, medicine, surgery, obstetrics, and the various specialties are studied in the clinical laboratories, the dispensary, and the wards of the hospital.

The principal studies of the first year are anatomy, including normal histology, microscopic anatomy, embryology, physiology, and physiological chemistry. The study of anatomy and physiology is continued in the second year. Throughout the second year general pathology, pathological anatomy, and pharmacology are studied. A practical course in bacteriology, with the chief emphasis upon its hygienic and pathological bearings, is given during three months of this year.

Upon the basis of thorough training in the medical sciences, pursued during the first two years of the course, the student should now be well fitted to undertake the study of practical medicine and surgery.

During the third year the general principles of medicine, surgery, and obstetrics are studied, and clinical instruction in medicine and surgery is given. The study of certain special branches of medicine is also begun. Leading features of the work of this year are the courses in the clinical laboratories and practical work in the dispensary.

During the fourth year the practical study of medicine, surgery, and obstetrics is continued, and instruction is given in gynecology and in the various special branches of medicine and surgery, viz: dermatology, diseases of the nervous system, genito-urinary diseases, laryngology, ophthalmology and otology, paediatrics, and psychiatry. In this year the students serve as clinical clerks and surgical dressers in the wards of the hospital and are in daily attendance at special classes in the dispensary. They also attend cases of labor in the obstetrical wards of the hospital, and, under proper supervision, in the homes of patients. For the ward and dispensary work the class is divided into small groups.

Instruction in hygiene, medical zoölogy, forensic medicine, and medical history is provided during the course.

Work in the dissecting room, in the laboratory, and at the bedside, demonstrations, clinics, lectures, and recitations are the main features of the methods of instruction. Simply didactic lectures occupy a subsidiary position, as compared with instruction by recitations and demonstrations and especially by practical work in the various laboratories, in the hospital wards, and in the dispensary. In consequence of the high standard of admission, the

classes are not likely to be excessively large, and abundant opportunity is therefore afforded for practical work for each student and for personal contact between teacher and student.

SPECIAL COURSES FOR GRADUATES IN MEDICINE.

Special courses of instruction for graduates in medicine are given during the months of May and June. These courses are in Pathology, Bacteriology, Clinical Microscopy, Medicine (including Diseases of Children and of the Nervous System), Surgery, Gynecology, Dermatology, Laryngology, and Ophthalmology and Otology. The instruction is intended to meet the requirements of practitioners of medicine, and is almost wholly of a practical character. It includes laboratory courses, demonstrations, bed-side teaching, and clinics in the wards, dispensary, amphitheatre, and operating rooms of the hospital. A preliminary course in normal histology for physicians is given during April.

The applicants are notified of the result by means of a printed list of the successful candidates.

The absence of candidates from Baltimore has been no bar to their appointment, in cases where adequate evidence of their claims has been presented; but it is obvious, from the nature of the case, that graduate students residing in Baltimore must have better opportunities than others of making their powers known to the appointing board, and during the last few years the number of persons appointed, who had not previously been resident here, is very small.

REGULATIONS.

1. The application must be made prior to May 1, in writing, addressed to the President of the University, and he will refer the papers to the Academic Council, by whom the nominations will be made to the Board of Trustees, at their meeting in June. There is no prescribed form of application.

2. The candidate must give evidence of a liberal education, such as the diploma of a college of good repute; of decided proclivity towards a special line of study, such as an example of some scientific or literary work already performed; and of upright character, such as a testimonial from some instructor.

3. The value of each fellowship is five hundred dollars. The holder is not exempt from the charges for tuition, or from laboratory fees. In case of resignation, promotion, or removal from the fellowship, payments will be made for the time during which the office shall have been actually held.

4. Every holder of a fellowship will be expected to perform such duties as may be allotted to him in connection with his course of study, to act when called upon as an examiner or as moderator in the examination-room, to give all his influence for the promotion of scholarship and good order, and in general to co-operate in upholding the efficiency of the University, as circumstances may suggest. He must reside in Baltimore during the academic year.

5. He will be expected to devote his time to the prosecution of special studies (not professional), under the direction of the head of the department to which he belongs, and before the close

of the year to give evidence of progress by the preparation of a thesis, the completion of a research, the delivery of a lecture, or by some other method.

6. He may give instruction, with the approval of the President, by lectures or otherwise, to persons connected with the University, but he may not engage in teaching elsewhere.

7. He may be reappointed at the end of the year, with the usual emolument, or with free tuition only.

8. Usually not more than two fellows will be appointed in any department of study.

9. As these fellowships are awarded as honors, those who are disposed, for the benefit of others, or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list.

III. Adam T. Bruce Fellowship.

This fellowship was founded by Mrs. Bruce, of New York, as a memorial of her son, Adam T. Bruce, Ph. D., late Fellow and Instructor in this University, and is awarded annually. It is bestowed by the appointing board upon the candidate whom they consider most likely to promote biological science, and especially animal morphology, by original research. The stipend will be the income of the Adam T. Bruce Fellowship endowment of ten thousand dollars. Preference is given to those who have already held fellowships in the Johns Hopkins University.

The electors consist of the President of the University, the chief instructor in animal morphology, the chief instructor in animal physiology, and a non-resident member annually chosen by the resident electors. The non-resident elector for the year 1898–99 was Professor Maynard M. Metcalf, Ph. D., of the Woman's College of Baltimore.

Appointments already Made.

1888. Henry Van Peters Wilson, Ph. D.
1889. Shozaburo Watase, Ph. D.
1890. Thomas Hunt Morgan, Ph. D.
1891. Robert Payne Bigelow, Ph. D.
1892. Robert Payne Bigelow, Ph. D.

1893. Maynard Mayo Metcalf, Ph. D.
1894. Ross Granville Harrison, Ph. D.
1894. Seitaro Goto, M. S.
1895. Henry McElderry Knower, Ph. D.
1895. George Lefevre, Ph. D.
1896. George Lefevre, Ph. D.
1897. Franklin Story Conant, Ph. D.
1897. Duncan Starr Johnson, Ph. D.
1898. Gilman A. Drew, Ph. D.

Regulations.

Candidates for the Bruce Fellowship must make application, in writing, to the President of the Johns Hopkins University before the first of May of the year of their candidature. They must forward to the President, at the same time, such evidence of their qualifications for appointment as they desire to be considered by the electors.

The electors may require any candidate to appear before them in person.

The Bruce Fellow shall devote his time to study and research in Biology at a place approved of by the President of the University, and he shall, during the month of February in the year of his tenure of the fellowship, send to the President a written statement of the scientific work accomplished by him since his appointment.

The tenure of the fellowship shall commence on the first of September in the year of appointment.

Two hundred and fifty dollars shall be paid to the Fellow on October 1, and the remainder at convenient intervals during his tenure of the fellowship.

The holder of the Bruce Fellowship shall not be more than thirty years of age at the date of his election.

The Bruce Fellow may be re-elected, but not oftener than twice.

The holder of the fellowship shall be exempt from charges for tuition.

The electors shall have the power to declare the fellowship vacant if its holder prove, in their opinion, unworthy; and no further stipend shall be paid to such person.

SCHOLARSHIPS.

[Regulations approved by the Trustees April 3, 1899, on the recommendation of the Academic Council, the Board of University Studies, and the Board of Collegiate Advisers. They will go into effect October 1, 1899.]

I. University Scholarships.

For the encouragement of scholarship among those who have taken the baccalaureate degree and wish to continue their studies here, a certain number of university scholarships are annually bestowed, as stated below:

1. A number, not exceeding five, are awarded at the opening of the academic year, by the Board of University Studies, to young men who completed their undergraduate course in this University at the close of the preceding session and received honors at Commencement.

2. Ten are open about the first of January to graduates of this or of other institutions, who have been studying here during the previous part of the session. Those who wish to be candidates must address their applications to the President of the University, who will appoint a committee of five to consider the applications, and, with the aid of such evidence as may be obtained, to make nominations to the Board of University Studies.

3. These scholarships entitle the holders to free tuition, and are tenable for one year. They do not carry exemption from laboratory fees.

4. They are awarded as honors, and those who are disposed, for the benefit of others or for any other reason, to waive the pecuniary emolument, or who are desirous of studying elsewhere, may do so and still have their names retained on the honor list. Those who receive the emolument will be expected to pursue their studies exclusively in this University.

5. The Board will reserve appointments, if worthy candidates do not offer.

II. Hopkins Scholarships.

In the will of the founder of the University, his Trustees are requested to "establish, from time to time, such number of free scholarships in said University as may be judicious, and to distribute the said scholarships among such candidates from the States of Maryland, Virginia, and North Carolina, as may be most deserving of choice, because of their character and intellectual promise, and to educate the young men so chosen free of charge."

Forty-five such scholarships, entitling the holders to free tuition, will be bestowed for the next academic year,—upon fifteen students from each of the three States named.

Students can be recognized as candidates only when actual residents of the State from which they desire to be appointed, during at least the year next preceding their enrolment in the University. If the appointing board is not sure as to the legal residence of any candidate, the point in question shall be determined by the Executive Committee of the Board of Trustees.

These scholarships are all bestowed for merit, and are tenable for the year subsequent to the appointment, the holders being re-eligible.

Successful candidates who are disposed, for the benefit of others or for any other reason, to waive the pecuniary emolument, may do so, and still have their names retained on the honor list. The scholarships may be forfeited because of frequent or prolonged absence, defective scholarship, or unworthy conduct.

Scholarships made vacant by resignation, by forfeiture, or by the non-appearance of worthy candidates at the regular times of selection, may be bestowed by the appointing board, at their discretion, upon other candidates who are found worthy, provided that the principles of this foundation are not departed from.

Holders of scholarships are not exempt from laboratory fees.

Scholars from Maryland.

These scholars are appointed by the Board of Collegiate Advisers, in accordance with the following regulations. No one will receive the honor whose standing as a whole is lower than "*good.*"

1. Five scholarships are open, at the beginning of the session, to those who have just completed their matriculation examination,

and who stand best in a subsequent special examination in mathematics, Latin, and Greek (or French and German).

2. Five are awarded in June to those matriculated students whose records in the studies of the first year are most creditable. By "studies of the first year" is meant either the studies laid down for the first year in one of the regular groups, or such other studies, covering fifteen hours of class-room work weekly, as may be approved of by the Adviser.

3. Five are awarded for excellence in the studies of the second year, upon the same terms as in the case of the first year; provided that the candidate shall have absolved the studies of the first year as above defined.

Scholars from North Carolina and Virginia.

Fifteen Hopkins Scholarships are awarded by the Academic Council to students from Virginia, and fifteen to students from North Carolina, who have already received a creditable baccalaureate degree or its equivalent. In case the entire number of scholarships are not required for graduate students, those that remain may be awarded to undergraduates, in the order of their merit. Applications, in writing, should be filed at the President's office prior to June 1.

III. Washington Scholarships.

The Trustees offer to residents of the District of Columbia two scholarships, yielding free tuition. These, like the Hopkins Scholarships, are awarded to undergraduate students for merit, do not carry exemption from laboratory fees, and are tenable for one year, the holders being eligible for re-appointment.

IV. Woodyear Scholarships.

These scholarships were founded in 1893 by Mrs. William E. Woodyear, of Baltimore, as a memorial of her husband. They are five in number—of the value of one hundred dollars each,—and are awarded annually for exceptional merit among those who need pecuniary assistance. They are offered primarily to undergraduates.

Charges for Tuition, Laboratory Expenses, etc.

A.

For all Courses except the Medical.

I. *Tuition Fees.*

The charge for tuition is one hundred and fifty dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There is no extra charge for instruction in any department of study, for lectures, or for the use of the library and reading-room. A gymnasium fee of five dollars per annum is charged to every undergraduate during his residence in the University, and the money thus acquired is devoted to defraying the expenses of the University Athletic Association. Graduate students who use the gymnasium, are also required to pay this fee. Fees are charged, as below stated, for material consumed in the laboratories, for registration, and for diplomas.

No deduction is made at the Treasurer's office because of absence for a period of less than half a year, or because a student gives only a part of his time to study, or because he belongs to but one class. Prompt payment of fees is required.

II. *Registration Fee and Caution Money.*

Every student (including Fellows, Fellows by Courtesy, workers in the laboratories, and attendants upon lectures) pays a registration fee of five dollars and deposits ten dollars as caution money at the time of his enrolment. The caution money is repaid to the student when he leaves the university, if there are no charges against him.

III. *Fees for Attendants on Single Courses.*

Students engaged in other pursuits—clergymen, lawyers, teachers, and other such persons—*who are not candidates for a degree,* are allowed to follow certain courses, not exceeding five lectures weekly, on the payment at one time of fifty dollars per

annum. They are not regarded as members of the University, but are enrolled as "attendants upon lectures," and are entitled only to such privileges as they have paid for. Persons who desire to be so enrolled, are required to make a special written application to the Registrar.

IV. *Graduation Fees.*

The graduation fees are as follows, payable before the delivery of diplomas or certificates:

Doctor of Philosophy, ...	$10.00
Proficient in Applied Electricity, . .	10.00
Bachelor of Arts, ...	5.00

V. *Laboratory Charges.*

In Chemistry: For undergraduates and for graduates who take Chemistry as a subordinate subject, twenty-four dollars a year; for graduates and special students following Chemistry as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Physics: For students who work one afternoon a week, twelve dollars a year; for those who work two afternoons a week, twenty-four dollars a year; for those who take Physics as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Biology: For students who work one afternoon a week, twelve dollars a year; for undergraduates and for graduates who take Zoölogy or Physiology as a subordinate subject, twenty-four dollars a year; for graduates and special students following a biological science as their principal subject, thirty-six dollars a year. For a half-year, the fee is one-half of these amounts.

In Geology: For graduates, ten dollars a year.

In all the laboratories, a charge is made for breakage and for apparatus not returned in good condition.

Exception to these charges can be made only at the written request of the Director of a laboratory, approved by the President of the University.

Fellows by Courtesy and others who have the privileges of guests in the various laboratories, are expected to pay the usual laboratory charges.

Doctors of Philosophy of this University who desire to remain for a time in the University after having received their diplomas, may do so without charge for tuition, but they are required to pay the usual laboratory charges.

B.

I. Candidates for the Degree of M. D.

The charge for tuition is two hundred dollars per annum, payable at the Treasurer's office in semi-annual instalments, October 1 and February 1. There are no extra charges for matriculation, for graduation, for instruction in any department, or for laboratory courses, except for materials consumed.

To a student who does not possess a microscope, there is an annual charge of five dollars for the use of one. The student is responsible for damage to the microscope thus rented.

A deposit of ten dollars as caution money is required from each student at the time of his enrolment. The caution money is repaid the student when he leaves, if there are no charges against him. Special charges are made for breakage and for damage to apparatus.

II. Graduates attending Special Courses in Medicine.

Graduates of medical colleges may be admitted to all the courses in Medicine, Surgery, Gynecology, and special departments of Practical Medicine and Surgery for the sum of $100 (not including the laboratory courses in Pathology, Bacteriology, and Clinical Microscopy), and to single courses on the payment of the fees named below:—

Medicine, ...	$25
Surgery, ...	25
Gynecology, ...	25
Each of the Special Departments of Practical Medicine and Surgery, ...	25

Clinical Microscopy, ...	$25
Pathological Histology (including post-mortem examinations and pathological demonstrations),	25
Bacteriology, ...	25
Advanced and special work, ...	25
Preliminary Course in Normal Histology, .	25

In the Pathological and Clinical Laboratories special charges are made for breakage and for damage to apparatus. A deposit of ten dollars as caution money is required, which is returned when the student leaves, if there are no charges against him.

Before entering upon any course of instruction in the Medical School, the student must obtain from the Dean of the Medical School, or his representative, a card certifying that he is qualified to follow the desired course. This card must be presented at the Treasurer's office of the University, where the fees must be paid before permission is granted to attend.

ALPHABETICAL LIST OF NAMES.

	Page.
Abbe, C.	10
Abbe, C., Jr.	58, 71
Abbott, A. C.	10
Abel, J. J.	4, 44
Abercrombie, J. R.	80
Abercrombie, R. T.	38
Adams, H. B.	4, 43, 44, 49, 89, 91, 109
Adams, H. C.	49, 59
Adams, H. H.	88
Adams, T. S.	13, 82
Adkins, W. H.	74
Adler, C.	53, 62
Adler, H.	80
Agelasto, M. A.	79
Ahrens, A. H.	80
Ahrens, T. G.	80
Akerman, J.	28
Alexander, W. J.	51, 60
Alleman, G.	70
Allen, E. P.	53
Allen, E. T.	65
Allen, H. W.	23
Allen, W. H.	86
Allen, W. M.	15
Allinson, F. G.	50, 59
Ames, D.	79
Ames, J. G., Jr.	81
Ames, J. McE.	78
Ames, J. S.	5, 43, 44, 54, 63, 75, 116
Anderson, J. N.	67
Anderson, R. B. T.	34
Anderson, W. P.	85
Andre, D. C.	80
Andrews, C. M.	54, 63
Andrews, E. A.	6, 43, 44, 52, 62, 130
Andrews, F.	80
Annis, B. S.	56
Applegarth, A. C.	62, 74
Applegarth, E. C.	54, 64, 76
Arbuckle, H. B.	71
Archibald, H. T.	15
Armstrong, E. C.	8, 57, 70, 107
Armstrong, J. R. C.	34
Arnold, B. W., Jr.	11, 12, 69
Arnolt, W. M.	52, 62
Artz, C. W.	74
Aspinwall, L. M.	85
Atherton, A. M.	25
Atkinson, J. N.	15
Atwood, F. G.	31
Auer, J.	28
Austin, M. F.	28
Ayres, B.	50
Ayres, P. W.	54, 62
Baden, W. W.	12, 55, 65, 74
Baer, W. S.	11, 72, 81
Baetjer, F. H.	25, 83
Baetjer, H.	34
Bagby, A., Jr.	64
Bagg, R. M.	68
Baker, A. E.	81
Baker, N. D., Jr.	80
Baker, T. S.	7, 56, 68, 79, 105
Baldauf, L. K.	88
Baldwin, C. G.	80
Baldwin, W. D.	25
Ballagh, J. C.	8, 68, 82, 109
Ballagh, W. W.	82
Ballard, H. H.	66, 76
Ballard, Z. M.	15, 83
Bandel, J. M.	38
Barcroft, D.	53, 62
Bansemer, W. S.	82
Bardeen, C. R.	8, 72, 135
Barker, L. F.	6, 56, 135
Barnett, G. E.	15
Barr, M. L.	11, 15
Bartell, G. E.	86
Barton, B. W.	10, 130
Barton, R., Jr.	79
Bascom, F.	66
Base, D.	68, 79
Basore, J. W.	13
Bassett, J. S.	56, 67
Batchelder, J. D.	12
Bates, J. S.	15
Bauer, L. A.	122
Baumgarten, W.	81
Baxter, A. H.	71, 81
Bayard, R. H.	76
Bayley, W. S.	58, 61, 74
Beadenkopf, T. M.	73

Page.
Beale, A. E. 23
Beale, R. B. 15
Beardsley, W. F. 15
Beatty, C. 82
Bechtel, E. A. 55, 76
Beck, G. C. 15
Becker, E. J. 12, 71, 81
Beeson, J. L. 66
Beeuwkes, C. J. 34
Beeuwkes, R. K. 41
Behrend, E. B. 80
Belden, H. M. 68
Belknap, R. E. 83
Bell, C. J. 52
Bell, L. 53, 62
Bemis, E. W. 61
Bennett, L. E. 80
Benson, T. P. 81
Bentley, A. F. 57, 68, 80
Berger, E. W. 14
Berkeley, W. N. 15
Berkley, H. J. 5
Bernhard, A. 77
Bernheim, B. 34
Berry, J. M. 25
Berry, T. A. 74
Bestor, O. B. 83
Bettmann, M. 23
Bevan, W. L. 75
Bevier, L. 50, 59
Beyer, H. G. 62
Beyer, S. W. 57, 68
Bibbins, A. 15
Bice, H. H. 77
Bigelow, R. P. 49, 55, 65, 177
Billings, J. S. 10
Billings, J. S., Jr. 77
Binswanger, A. C. 82
Bird, A. R. 38
Bissing, G. 52, 61, 74
Bissing, H. 82, 85
Bissing, W. 79
Blachstein, A. G. 54
Black, H. B. 82
Black, H. V. 15
Black, J. W. 64, 76
Blackford, W. S. 80
Blackiston, A. H. 42
Blackmar, F. W. 54, 63
Blackshear, C. C. 64
Blackwell, I. H. 15
Blagden, C. W. 81
Blake, F. R. 11, 13, 83
Blakeslee, W. H. 25
Blanchard, W. M. 15
Bliss, W. J. A. 7, 67, 84, 116

Page.
Bloodgood, J. C. 7
Bloombergh, H. D. 25
Bloomfield, M. 4, 43, 50, 59, 99
Blume, J. 55
Boggs, T. R. 25
Boggs, W. J. 15
Bogue, H. 34
Bolgiano, W. 77
Bolling, G. M. 56, 69
Bond, A. K. 73
Bonnotte, F. 69
Bonsteel, J. A. 11, 15
Booker, J. M. 34
Booker, W. D. 5
Borst, C. A. 54
Rosley, J. R. 25
Bouchelle, B. N. 34
Bowdoin, H J. 74
Bowdoin, W. G. 2
Bowen, B. L. 62
Bowen, E. W. 65
Bowlus, E. L. 83
Bowman, J. H. 86
Boyd, W. J. 31
Boyer, N. 34
Boynton, G. E. 80
Brackett, B. B. 70, 85
Brackett, J. R. 10, 63
Brackett, R. N. 62
Brady, J. H., Jr. 83
Brady, W. R. 86
Branch, B. H. 85
Branch, C. H. H. 82
Brander, W. W. 15
Brandow, M. 8, 56
Braun, J. 38
Breed, A. A. 34
Breed, R. A. 31
Breithaupt, E. C. 84
Brent, D. K. 83
Briggs, E. 23
Briggs, F. F. 79
Briggs, J. B., Jr. 23
Brigham, C. P. 65, 76
Bright, J. W. 5, 43, 51, 59, 101
Briscoe, J. S. 34
Britton, E. B. 31
Brögger, W. C. 122
Bromwell, W. 63, 76
Brooks, C. E. 34
Brooks, W. K. 4, 43, 44, 49, 89, 91, 130
Brough, C. H. 58, 71
Brown, A. 31
Brown, A. G. 2
Brown, E. B. 39
Brown, G. D. 15, 82

Page.
Brown, G. S. 80
Brown, G. V. 15
Brown, H. M. 76
Brown, J. W. 74
Brown, L. 82
Brown, S. B. 79, 85
Brown, T. M. 79
Brown, T. R. 72, 80
Browne, A. L. 77
Browne, B. B., Jr. 28, 83
Browne, S. H. 79, 85
Browne, W. H. 5, 43, 44, 91, 101
Browne, W. H., Jr. 78, 84
Brownell, E. E. 22
Brownlee, R. H. 15
Bruce, A. T. 49, 52, 61, 91, 177
Bruce, E. S. 39
Bruce, J. D. 67
Brülle, H. 23
Brune, H. M. 76
Bruner, J. D. 67
Bruns, R. M. 28
Brush, M. P. 71
Bruton, A. W. 39
Bryan, A. C. 69, 80
Bryan, J. E. 78
Bryan, W. M. C. 28
Bucher, J. E. 67
Buckler, H. W. 22, 82
Buckler, T. H. 75
Budde, K. 10
Bump, C. W. 80
Bumstead, H. A. 79
Bunting, C. H. 11, 25
Burgess, E. S. 51
Burnam, C. F. 23
Burney, W. 50
Burnham, W. H. 53, 62
Burrell, J. L. A. 34
Burt, B. C. 51
Burton, R. 62
Burton, W. M. 54, 63
Bush, C. 28
Butler, J. I. 25
Butler, P. 13, 58
Bye, M. 39
Byers, H. G. 14
Byrne, H. S. 34
Caldwell, B. P. 15
Caldwell, W. 21
Callahan, J. M. 10, 57, 70
Callaway, M., Jr. 54, 63
Calvert, W. J. 72
Cameron, F. K. 67, 79
Cameron, M. J. 79
Cameron, T. F. P. 81

Page.
Campbell, H. 15
Campbell, J. P. 53, 62, 75
Campbell, K. 58, 71
Canfield, W. B. 75
Canter, H. 16
Canter, H. V. 16
Carey, C. H. 77
Carey, G. 79
Carey, G. G., Jr. 75
Carey, H. W. 26
Carey, N. P. 79
Carichoff, E. B. 85
Carmichael, N. R. 57
Carroll, J. J. 31
Carroll, M. 10, 56, 66
Carson, R. E. 78
Carson, W. H. 78
Carter, E. P. 57
Casanowicz, I. M. 65
Case, W. A. 16
Caspari, C. E. 16, 82
Cassidy, P. J. 72
Cator, G. 41
Cattell, J. M. 52
Chace, E. S. 23
Chamberlain, J. S. 13
Chamberlin, W. E. 67
Chambers, A. D. 57, 69
Chambers, L. M. 34
Chambers, V. J. 16
Chandler, J. A. C. 69
Chapman, C. H. 54, 64, 77
Chapman, J. W., Jr. 69
Chase, L. A. 28
Chatard, J. A. 16
Chesnut, W. C. 80
Child, C. G. 57, 68
Chittenden, A. S. 24
Chowning, W. M. 26, 82
Christian, H. A. 24
Christie, F. A. 53
Church, A. L. 31
Churchman, J. W. 28
Clark, C. B. 82
Clark, C. C. 82
Clark, C. T. 34
Clark, F. E. 16
Clark, H. L. 57, 70
Clark, J. G. 8
Clark, W. B. 5, 43, 90, 122, 128
Clark, W. L. 80
Clarke, F. A. 80
Clarke, G. M. 14, 84
Clarke, H. 53
Clarke, S. F. 49, 59
Clarke, T. W. 28

Page.
Clarke, W. N. 10
Clarkson, W. B. 74
Cleaver, W. M. 16
Clopton, M. B. 32
Clunet, F. J. 34
Clutz, F. H. 57, 70
Coale, R. D. 51, 59
Coates, C. E., Jr. 65, 76
Coble, A. B. 16
Coblens, G. A. 32
Coe, J. W. 72
Coey, A. J. 32
Cohen, A. 8, 56, 67, 79, 114
Cohen, M. S. 81
Coker, W. C. 16
Cole, R. I. 22
Cole, W. R. 76
Collier, F. W. 82
Comer, R. T. 26
Comstock, W. J. 51
Conant, F. S. 49, 57, 71, 178
Cone, B. M. 81
Cone, C. 81
Cone, S. M. 8, 78
Conklin, E. G. 55, 65
Conn, H. W. 60
Connor, G. L. 26
Connor, R. 26
Conrad, C. A. 81
Constantine, C. W. 34
Cook, C. G. 71
Cook, H. W. 28, 84
Cook, J. R. 32
Cook, T. G. 39
Cook, V. 78
Cooke, H. W. 79
Cooke, T., Jr. 77
Cooley, H. S. 69
Coons, J. J. 28
Cooper, J. C. 28
Corbin, M. M. 85
Corning, J. W. 85
Costello, W. E. 32
Cottman, L. W. 85
Cox, E. L. 80
Cox, W. 81
Cragin, F. W. 14
Craig, T. 4, 43, 49, 59, 114
Crane, F. 71
Craven, A. F. 66
Crawford, A. C. 8
Crenshaw, J. B. 8, 44, 66
Crew, H. 52, 62
Cromwell, W. K. 75
Cronin, F. H. 39
Crowther, J. A. 32

Page.
Crum, C. W. R. 16, 75
Cullen, T. S. 7
Culver, F. B. 77
Curtis, W. C. 16
Curtiss, R. M. 31
Cushing, H. W. 9
Cutting, S. W. 65
Daish, J. B. 77
Dancy, W. R. 24
Daniel, W. B. 16
Daniels, A. L. 52
Dapprich, F. R. 39
Darrell, H. C. 85
Dashiell, P. J. 65, 76
Davidson, G. D. 34
Davis, E. W. 52, 60
Davis, F. C. 22
Davis, J. E. 80
Davis, J. S. 22
Davis, T. J. 32
Davis, W. S. 72
Dawson, J. 16
Dawson, P. M. 13, 72, 81
Day, D. T. 52, 60, 74
Day, W. C. 51, 60, 73
Day, W. S. 70
De Grange, M. 34
De Haan, F. 57, 68
Delitzsch, F. 90
Dembitz, A. A. 79
Dennard, J. H. 32
De Roode, R. J. J. 54, 64
Detwiler, A. K. 79
Deutsch, I. 85
Devries, W. L. 55, 66, 77
Dewey, D. R. 53, 61
Dewey, J. 52, 60
Dickerson, E. T. 16
Dieffenbach, A. C. 84
Diehl, C. E. 82
Diggs, C. F., Jr. 39
Dixon, W. T. 2
Dobbin, G. W. 8, 79
Dohme, A. R. L. 63, 75
Dohme, G. C. 14, 28, 84
Dolley, D. H. 28
Donaldson, H. H. 51, 61
Dorr, L. B. 77
Dorsey, N. E. 8, 57, 70, 80, 116
Dorsey, W. R. 82
Doub, A. A. 75
Doughty, H. W. 85
Douglas, J. M. 16
Dowell, H. B. 81
Downes, H. C. 34
Drake, G. S. 26

Page.
Drew, G. A.....9, 13, 49, 53, 71, 178
Drewry, W. S..... 16
Dreyer, G. P.....7, 44, 54, 64, 76, 134
Duck, R. S..... 39
Dudley, H..... 28
Duffy, E., Jr..... 76
Duffy, R.....28, 84
Duggan, J. R.....52, 60
Duncan, L.....6, 43, 44, 61
Dunlop, J..... 28
Durfee, W. P.....51, 60
Dutcher, A..... 26
Dyar, H. M..... 85
Eager, J. H., Jr..... 35
Ebeling, H. L.....55, 65, 74
Eckels, W. A.....12, 71
Eddy, D. L..... 29
Edes, R. E..... 77
Edgar, P.....57, 70
Edmond, G. W..... 75
Edmondson, J. H..... 81
Edmunds, C. K..... 83
Egge, A. E.....53, 62
Eggers, A. H..... 24
Eichelberger, W. S.....54, 65, 75
Eiesland, J..... 71
Eisenbrandt, W. H..... 86
Eisendrath, D. N..... 77
Eisenhart, L. P..... 16
Eldridge, G. D., Jr..... 82
Elliott, A. M.....4, 43, 44, 90, 107
Ellis, W. L..... 82
Elmer, H. C 53, 62
Elting, A. W.....11, 73
Ely, G. S.....51, 60
Ely, R. T..... 91
Ember, A..... 39
Emerson, A..... 52
Emerson, C. P..... 22
Emerson, W. H.....53, 61
English, H..... 75
Ensor, J. T..... 21
Epler, B. N..... 22
Erlanger, J..... 22
Erving, W. G..... 29
Estes, C. S..... 68
Estill, H. S..... 16
Evans, H. C..... 24
Evans, P. S., Jr..... 22
Everett, W. T..... 41
Ewell, J. E..... 35
Ewing, A. H..... 16
Ewing, J. R.....16, 72
Fahlberg, C..... 50
Fairbank, R..... 24
Fairclough, H. R.....54, 69

Page.
Farr, J. M..... 16
Farrar, C. B 24
Fassig, O. L.....9, 122
Faust, A. B.....55, 66, 77
Faust, E. S..... 78
Fay, E. A..... 59
Fay, E. W.....54, 64
Fay, H..... 68
Fearn, T..... 31
Fels, M..... 74
Fenwick, B. L..... 39
Ferguson, J. F.....21, 84
Fernald, H. T..... 64
Ferren, H. M..... 56
Ferry, E. S..... 56
Ferry, N. S.....11, 29
Field, G. W..... 66
Fields, J. C.....53, 62
Fifield, J. C..... 76
Finney, J. M. T..... 6
Fischer, J. S.....16, 84
Fishach, L. G..... 35
Fisher, A. L..... 24
Fisher, F. C..... 35
Fisher, W. A., Jr..... 24
Fitzgerald, T., Jr.....17, 84
Fleming, W. S..... 52
Fletcher, H..... 24
Fletcher, L. B.....51, 59
Fletcher, R..... 10
Flexner, A..... 75
Flexner, S.....5, 55
Flinn, F. B..... 39
Flint, J. M..... 24
Flood, N. A..... 78
Fogle, C. V..... 29
Follis, R. H., Jr..... 22
Fontaine, J. A..... 61
Fooks, W. M..... 35
Foote, T. C..... 17
Ford, C. E., Jr..... 39
Ford, W. W.....11, 73
Forman, L. L..... 67
Forman, S. E..... 70
Fosnocht, E. B..... 35
Fossum, A..... 62
Foster, F..... 35
Foster, H. B..... 14
Foster, N. B..... 29
Foster, R. C..... 82
Foushee, W. L..... 17
Foutz, C. R..... 41
Fowler, H. A.....11, 26
Fowler, L. H..... 84
Fowler, T. H..... 14
Francis, I. H., Jr..... 35

Page.
Francis, W. W. ... 29, 84
Francke, K. ... 10
Frank, Edmund ... 86
Frank, Eli ... 81
Frank, S. W. ... 85
Frankenthal, M. A. ... 29
Franklin, E. C. ... 67
Franklin, F. ... 50, 59
Fraps, G. S. ... 13
Fraser, W. R. ... 70
Fraser, H. M. ... 85
Fraser, J. C. W. ... 17
Freeman, A. T. ... 17
Freeman, S. H. ... 51
Frein, P. J. ... 13
French, J. C. ... 85
Friedenwald, Harry ... 75
Friedenwald, Herbert ... 78
Friedenwald, J. ... 76
Frothingham, A. L., Jr. ... 52
Frye, H. W. ... 85
Fulton, C. L. ... 77
Fulton, F. T. ... 22, 82
Futcher, T. B. ... 7
Gaddess, C. C. ... 85
Gallagher, J. D. ... 22, 82
Gallaudet, E. F. ... 69, 85
Galloway, W. F. ... 56, 69, 79
Gane, H. S. ... 57, 68
Gantt, H. L. ... 78
Gantz, A. D. ... 82
Gardner, H. B. ... 53, 64
Gardner, W. C. ... 84
Garner, S. ... 59
Garner, W. W. ... 17
Garrett, R. ... 17
Garrison, F. H. ... 78
Garthe, L. ... 74
Gassman, H. M. ... 83
Gates, W. E. ... 75
Gay, F. P. ... 26
Geer, H. G. ... 7
Gemmill, J. R. ... 85
Geraghty, J. T. ... 29
Gerry, J. P. ... 78
Gieske, G. E. ... 77
Gilbert, N. E. ... 17
Gilchrist, T. C. ... 5
Gildersleeve, B. L. ... 3, 43, 44, 89, 91, 97
Gildersleeve, R. C. ... 77
Gill, A. C. ... 54
Gilman, B. I. ... 51
Gilman, D. C. ... 2, 3, 43, 44
Gilman, G. H. ... 55
Gilpin, J. E. ... 8, 44, 66, 77, 119
Gittings, D. S. ... 74

Page.
Glascock, C. C. ... 17
Glaser, O. C. ... 85
Glassie, H. H. ... 80
Glenn, J., Jr. ... 75
Glenn, L. C. ... 13
Glenn, W. L. ... 75
Glenny, W. H. ... 29
Goodman, E. ... 73
Goodnow, H. R. ... 52
Goodwin, C. J. ... 55, 64
Goodwin, E. B. ... 57
Gordon, A., Jr. ... 84
Gordon, D. H. ... 76
Gordon, J. H., Jr. ... 86
Gore, J. W. ... 49
Gorrell, J. H. ... 67
Gorsuch, W. S., Jr. ... 86
Gorton, W. C. L. ... 54, 63, 75
Goto, S. ... 49, 178
Gould, E. R. L. ... 52, 61
Gould, W. E. ... 17
Graham, N. D. ... 26, 83
Graham, R. O. ... 62
Grammer, C. E. ... 73
Grant, J. F. ... 11, 29
Grant, U. S. ... 55, 66
Grasty, J. S. ... 41
Grave, C. ... 13
Gray, G. H. ... 82
Gray, G. W. ... 68, 78
Green, D. I. ... 66
Green, E. L. ... 57, 70
Greenbaum, H. S. ... 85
Greenbaum, L. E. ... 80
Greenbaum, M. D. ... 82
Greene, C. W. ... 58, 71
Greene, H. E. ... 5, 44, 101
Greene, J. D. ... 85
Greenebaum, E. C. ... 81
Greenleaf, H. S. ... 81
Grey, W. R. ... 67
Griffin, E. H. ... 3, 43, 44, 113
Griffin, E. J., Jr. ... 39
Griffin, J. J. ... 68
Griffin, J. W. ... 85
Griffin, L. E. ... 17
Griffin, N. E. ... 17, 81
Griffiss, W. ... 81
Griffith, G. ... 17
Griffith, W. A. ... 39
Grimes, R. H. ... 85
Grimm, K. J. ... 11, 13, 58
Grimslee, G. P. ... 67
Griswold, B. H., Jr. ... 81
Groome, P. L. ... 17
Guenther, F., Jr. ... 17

Page.
Guernsey, R. 17
Guggenheimer, C. M. 85
Guggenheimer, C. S. 83
Guggenheimer, J. C. 76
Guggenheimer, S. H. 78
Guild, E. H. 82
Guthrie, C. E. 21
Guttmacher, A. 17
Guy, D. D. 78
Hagen, S. N. 14
Haggett, A. S. 57, 70
Haight, M. 53
Hains, P. C., Jr. 85
Haldeman, R. C. 86
Hall, E. H. 50, 59
Hall, G. W. 26
Hall, J. L. 53, 66
Hall, L. B. 50
Halsted, G. B. 49, 59
Halsted, W. S. 4, 44
Hamburger, L. P. 72, 81
Hamilton, H. A. 13
Hamilton, I. K. 85
Hamman, L. V. 26
Hammond, W. B., Jr. 84
Hancock, F. A. 17, 83
Hancock, H. 77
Hancock, R. J. 81
Handy, W. W. 85
Hanna, H. S. 85
Harden, A. D. 82
Harding, E. C. 50
Harding, R. 62
Hardy, J. G. 58, 71
Harlan, W. B. 74
Harriman, H. M. 86
Harris, H. 22
Harris, L. M. 71
Harris, N. M. 9, 136
Harris, W. A. 55, 66
Harris, W. H., Jr. 89
Harrison, C. N. 17, 71
Harrison, R. G. 7, 49, 56, 67, 77, 135, 178
Harrison, T. P. 55, 65
Harry, J. E. 54, 63, 75
Harry, P. W. 84
Harry, S. C. 81
Hart, E. 49, 59
Hartloff, C. W. 82
Hartman, R. N. 67
Hartogensis, B. H. 75
Hartwell, E. M. 50, 59
Harvey, J. W., Jr. 80
Harvey, R. B. 82
Harwood, L. 83
Harwood, S. P. 85

Page.
Haskell, L. W., Jr. 85
Haskins, C. H. 64, 76
Hastings, T. W. 11, 73, 81
Hastreiter, R. F. 26
Hatch, E. C. 89
Hatfield, J. T. 54, 64
Hathaway, A. S. 52
Hathaway, J. H. 11, 26
Haupt, P. 3, 43, 90, 100
Hauser, C. A. 81
Haussmann, W. A. 57, 68, 80
Haviland, M. L. 29
Haworth, E. 62
Hayes, C. W. 53, 62
Hayes, S. Q. 85
Haynes, G. H. 67
Haynes, J. 68
Haynes, M. S. 29
Haywood, R. W. 17
Hazelton, J. H. 81
Hazen, C. D. 67
Hazen, H. H. 89
Heald, E. de F., Jr. 88
Healy, W. P. 11, 24
Hedrick, W. A. 62
Heitmuller, G. H. 79
Hemmeter, J. C. 64
Hemphill, C. R. 50
Hench, G. A. 54, 63
Henderson, W. E. 58, 70
Hendren, S. R. 68
Hendrickson, G. L. 76
Hendrickson, W. F. 24, 83
Henschen, G. N. C. 77
Hering, D. W. 49
Hering, H. S. 7
Herrick, A. B. 11, 73
Herrick, F. H. 62
Herrick, J. C. 17
Herriott, F. I. 67
Herty, C. H. 64
Hewlett, A. W. 24
Heyman, S. 85
Hicks, F. C. 17
Higbee, H. H. 68
Hill, G. H. 85
Hill, H. D. 85
Hill, J. P. 86
Hill, M. W. 86
Hill, W. B. 89
Hilles, W. S. 77
Hillyer, H. W. 52, 61
Hindshaw, H. H. 17
Hines, E. A. 82
Hinkley, J. 75
Hirsh, J. L. 80

Page.
Hirshberg, L. K.....29, 84
Hite, B. H..... 56
Hitzrot, J. M..... 26
Hobbs, W. H.....54, 62
Hodge, C. F.....54, 63
Hodges, C. S..... 84
Hodges, G. H..... 86
Hodges, J. S..... 75, 84
Hodges, W. L..... 86
Hoeing, C.....58, 71
Hoffmann, F. O. K..... 76
Hofmann, J.....11, 18
Holcomb, W. P..... 61
Holden, C. C..... 77
Holden, G. B..... 26
Hollander, J. H.....7, 56, 67, 79, 91, 109
Hollander, L. M..... 86
Hollis, F. S..... 69
Holmes, D. H.....56, 67
Holmes, J. H..... 64
Holmes, L. D..... 32
Holmes, W. B..... 18
Homer, H. L..... 39
Hood, F..... 18
Hopkins, A. J.....56, 67
Hopkins, L. N..... 2
Horn, D. W..... 18
Horner, J. M..... 75
Horst, C. H..... 29
Hough, T.....56, 67, 75
Howard, C. M..... 75
Howard, C. McH..... 79
Howard, D. A..... 85
Howe, F. C..... 66
Howell, W. H.....5, 43, 44, 52, 60, 74, 134
Hoye, H. J..... 22
Hubbard, F. G..... 62
Hubner, W. R..... 84
Huff, W. B..... 18
Hughes, P. M..... 75
Hugnenin, J..... 18
Huizinga, A. H.....52, 64
Hulburt, L. S.....6, 44, 67, 114
Hull, W. I.....66, 77
Hullihen, W..... 18
Hume, E. H..... 26
Humphreys, R. E..... 18
Humphreys, W. J.....57, 70
Hunner, G. L..... 73
Hunt, R.....7, 57, 69, 79
Hunt, R. D..... 68
Hunter, J. R..... 68
Hurd, H. M.....4, 44
Hurdon, E..... 9
Hussey, G. B.....53, 62
Hutchinson, C. T.....6, 54, 68, 84

Page.
Hutton, G. H., Jr..... 84
Hutton, R. E..... 84
Hyde, E. P..... 36
Hyman, S..... 29
Hyslop, J. H..... 53, 62
Iles, M. W..... 49
Illmer, L., Jr..... 41
Ingle, E..... 74
Ingram, C..... 42
Irby, J. R. McD..... 50
Ishizaka, M..... 68
Iyenaga, T..... 64
Jackson, L. L., Jr..... 81
Jacobs, H. B..... 8
Jacques, W. W.....50, 59
Jagemann, H. C. G.....52, 60
James, B. B..... 70
James, G. O.....13, 82
James, J. A.....56, 67
James, M..... 80
James, R..... 41
James, W. McC..... 39
Jameson, J. F.....51, 60
Jamieson, A. F..... 73
Janney, S. S..... 82
Jarvis, E. A..... 73
Jastrow, J.....53, 61
Jayne, J. L..... 84
Jelke, W. F.....11, 29
Jenkins, M. E..... 83
Jenkins, T. A..... 68
Jenness, P..... 41
Jewell, L. E..... 9
Jewett, H. J., Jr..... 80
Johnson, C. W. L.....56, 69, 79
Johnson, D. S.....9, 49, 58, 70, 130, 178
Johnson, E. K..... 31
Johnson, F. H..... 83
Johnson, J. H..... 74
Johnson, T. W..... 80
Johnston, C.....7, 55, 68, 101
Johnston, G. W.....56, 68
Johnston, J. C..... 78
Johnston, O. M.....57, 69
Johnston, W. B..... 26
Jones, A. D., Jr..... 36
Jones, F. R..... 69
Jones, H. C.....8, 55, 66, 77, 119
Jones, J. W..... 41
Jones, R. H..... 84
Jones, T. D..... 36
Jones, T. M..... 29
Jones, W.....8, 65, 77
Jones, W. App.....58, 71
Jones, W. Aug..... 77
Joyner, L. I..... 36

Page.
Jungbluth, K., Jr. 36
Jungbluth, M. 36
Kalb, C. W. 84
Kalb, J. A. 36
Kane, T. F. 57, 68
Karslake, W. J. 68
Karsted, A. 29
Kastle, J. H. 54, 62
Kaufman, H. M. 26, 83
Kaufman, M. 82
Kaye, P. L. 71
Keating, H. W. 79
Keech, E. P., Jr. 78
Keeler, J. E. 74
Keidel, A. 86
Keidel, F. B. 86
Keidel, G. C. 8, 56, 69, 77
Keirle, N. G., Jr. 32
Keiser, E. H. 52, 60
Kellogg, J. L. 55, 66
Kellogg, W. C. 24
Kelly, H. A. 4, 44
Kemp, G. T. 53, 61, 74
Kennard, J. A. 84
Kennedy, E. W. 70
Kent, N. A. 18
Kern, J. W. 12
Kerr, R. C. 86
Kershner, B. M. 86
Keyes, C. R. 55, 66
Kilgore, B. W. 12
Killmon, F. A. 83
Kilvert, C. A. 82
Kimball, A. H. 26
Kimball, A. L. 52, 60
Kimball, R. F. 74
Kinard, J. P. 69
King, F. P. 56, 70
King, J. H. 36
King, S. H. 18
Kingsbury, S. S. 71
Kinsley, C. 18
Kirk, W. H. 57, 69, 81
Knapp, G. W., Jr. 36
Knight, C. H. 83
Knight, N. 12
Knipp, J. E. 83
Knower, H. McE. 12, 49, 57, 70, 78, 178
Knower, W. 79
Knox, J. H. M., Jr. 11, 73
Kohler, E. P. 55, 66
Kohn, W. I. 39
Koyl, C. H. 51
Krafft, H. F. 81
Krager, W. M. 36
Krapp, G. P. 18, 72

Page.
Kuhara, M. 50, 60
Kuhn, A. L. 32
Kurrelmeyer, H. 36
Kurrelmeyer, W. 13, 58, 83
Kyes, P. 24
Lacy, R. 83
Ladd, L. W. 22
Laessig, J. H., Jr. 75
Laing, G. J. 57, 70
Lamb, A. L. 77
Lamson, T. 26
Lanahan, H. 83
Land, P. H. 12, 56
Langfeld, M. 73, 81
Lanier, B. B. 78
Lanier, C. D. 77
Lanman, C. R. 50
Latane, J. H. 10, 69, 80, 112
Latane, S. P. 32
Lauchheimer, S. H. 78
Lauer, P. E. 55, 66
Lawson, A. C. 53, 63
Lazear, J. W. 9, 77
Lazenby, M. 36
Learned, M. D. 53, 62
Leary, T. M. 83
Lease, E. B. 56, 68
Lebus, L. 24
Lee, F. S. 52, 61
Lee, G. C. 9, 58, 71, 109
Lee, J. L. G. 81
Lees, J. T. 63
Lefevre, G. 49, 57, 70, 79, 178
Lehr, L. C. 29, 84
Leigh, J. E. 18
Lengfeld, F. 54, 63
L'Engle, E. J. 30
L'Engle, E. M. 29
Leonard, A. G. 72
Leonard, B. F. 32
Leopold, E. J. 36
Levering, E. 2
Levering, J., Jr. 36
Levermore, C. H. 52, 61
Levias, C. 57
Levy, W. S. 83
Lewis, C. S. 84
Lewis, D. M. 26
Lewis, E. P. 69
Lewis, E. S. 55, 66
Lewis, W. H. 24
Liddell, D. M. 36
Liebig, G. A., Jr. 52, 61, 74
Light, G. U. 73
Lilly, W. L. 39
Lincoln, M. W. 29

Page.
Lindheim, N. B. 36
Lindley, W. P. 18
Lingle, D. J. 55, 66
Linn, A. F. 54, 66
Linthicum, G. M. 79
Linthicum, S. B. 78
Lisberger, S. J. 39
Litchfield, G. V., Jr. 29
Little, C. S. 22
Little, H. W. 24
Livingood, L. E. 57
Loane, J. A. 75
Lockwood, E. K. 32
Lodge, G. 53, 61, 74
Logie, T. 54, 64
Long, M. 26
Long, O. F. 58, 70
Longcope, W. T. 11, 26, 33
Loomis, H. B. 55, 64
Lootz, E. 29
Lord, J. D., Jr. 75
Lord, J. W. 7, 75, 135
Lothrop, E. P. 30
Loving, R. E. 18
Lowe, J. H. 78
Lowell, E. L. 24
Lowndes, E. 39
Luchs, M. 33
Lucke, H. J. 14, 34
Ludlum, S. D. 30
Luetscher, J. A. 22
Lupton, F. A. 22
Lyle, A. G. 27
Lyman, J. A. 66
Lynch, F. W. 22
Lyon, C. E. 18, 33
Lyon, I. P. 72
Lyons, W. P. 75
Macallum, A. B. 63
Macauley, J. B. 77
MacCallum, J. B. 24
MacCallum, W. G. 9, 72, 136
MacGregor, G. M. 30
Maccoun, A. E. 35
Machen, A. W., Jr. 33
Machen, J. G. 36
Mackall, L. L. 36
Mackay, E. 57, 70
Mackenzie, A. S. 55, 68
Mackenzie, J. N. 5
MacMechan, A. 54, 63
Maddren, W. H. 27
Madison, J. D. 11, 73
Magee, C. L. 22
Magoun, H. W. 54, 64
Magruder, E. P. 32

Page.
Magruder, H. S. 79
Mahon, R. W. 60
Main, J. H. T. 56, 66
Mall, F. P. 5, 44, 53, 135
Maltbie, W. H. 57, 69
Manken, H., Jr. 36
Mann, A. 77
Manning, E. P. 56, 68
Manning, H. P. 55, 65
Marden, C. C. 7, 68, 77, 107
Marden, T. B. 78
Marine, R. E. 33
Marquand, A. 50, 59
Marshall, H. T. 11, 73, 81
Marshall, S. A. 30
Marshall, T. H. 36
Marston, O. J. 18
Martin, B. E. 32
Martin, G. C. 11, 18
Martin, H. N. 39
Martin, W. E. 18
Marvell, M. W. 24
Mason, D. 31
Mather, F. J., Jr. 56, 66
Mather, W. T. 58, 71
Mathews, E. B. 7, 44, 56, 68, 122
Matzke, J. E. 63
Maury, R. M. 40
Maynard, G. S. 61, 86
McAll, R. L. 40
McBryde, C. N. 72
McBryde, J. M., Jr. 57, 71
McBryde, M. B. 18
McCabe, T. 54, 63, 76
McCaskell, J. A. 36
McComas, H. C., Jr. 33
McCreary, G. W. 73
McCrosky, J. W. 35
McCulloh, W. W. 78
McDonald, A. 53
McDougall, A. W. 79
McDowell, W. L. 79
McFarland, J. S. 30
McIlwaine, H. R. 67
McInnes, C. R. 14
McJunkin, P. 18
McIntosh, D. G., Jr. 34
McIver, A., Jr. 35
McKay, C. R. 35
McKee, S. R. 69
McKenzie, R. M. 70
McKeough, E. P. 27
McLane, A., Jr. 75
McLane, J. L. 2, 44
McLane, R. M., Jr. 76
McLaughlin, A. C. 18

Page.
McMurrich, J. P. 61
McPherson, J. H. T. 55, 64, 75
McPherson, N. C. 84
McPherson, W. B. 18
McWhorter, A. W. 19
Means, D. McG. 50
Meisenhelder, E. W. 30
Meisenhelder, J. E. 30
Mellus, E. L. 12
Meltzer, C. R. 24
Mendenhall, C. E. 58, 72
Menger, L. E. 56, 67
Meriwether, C. 67, 76
Merriam, L. S. 56, 67
Merrill, J. F. 13
Metcalf, M. M. 49, 56, 67, 177, 178
Metcalf, W. V. 64
Metzler, G. F. 65
Meyer, J. F. 19
Mikkelsen, M. A. 56, 66
Milden, A. W. 13
Miles, L. W. 19, 81
Miller, C. W. E. 6, 43, 52, 61, 74
Miller, E. G., Jr. 75
Miller, F. O. 84
Miller, H. C. 40
Miller, I. 32
Miller, R. D. 11, 14, 84
Miller, W. H. 77
Milroy, W. M. 65
Mitchell, J. F. 72, 79
Mitchell, O. H. 51, 60
Mitchell, S. A. 12, 58, 72
Mitsukuri, K. 51, 60
Mixter, C. W. 80
Moale, P. R. 68, 78
Mohler, J. F. 71
Molinard, W. R. 85
Montgomery, W. A., Jr. 19, 72, 80
Moore, E. S. 27
Moore, G. N. 77
Moore, H. L. 57, 70
Moore, H. M. 23
Moore, J. H. 19
Moore, J. L. 54, 65
Moore, J. S. 37
Moran, T. F. 57, 69
More, L. T. 57, 69
Morgan, L. C. 73
Morgan, P. S. 37
Morgan, T. H. 49, 55, 64, 177
Morris, L. W. 32
Morrison, C. J. 41
Morrison, G. C. 78
Morse, H. N. 4, 43, 44, 50, 119
Morse, R. B. 37

Page.
Mosemiller, C. A. 19
Moses, J. M. 81
Mosher, C. D. 25
Motley, D. E. 19
Motora, Y. 53, 63
Moulton, C. W. 63
Mower, F. D. 40
Mower, McH. 40
Muckenfuss, A. M. 69
Mullen, J., Jr. 85
Mullen, J. M. 37
Mullikin, C. 81
Murkland, P. A. 37
Murray, A. C. 79
Murray, A. T. 54, 64
Murray, D. A. 55, 67
Murray, F. A. G. 32
Murray, N. 5, 44
Mustard, W. P. 55, 65
Myers, S. B. 84
Myers, W. S. 19
Myrick, H. G. 25
Nachtrieb, H. F. 52
Nakaseko, R. 19
Neill, C. P. 71
Nelson, J. 53, 63
Ness, J. A. 12, 58
Newcomb, S. 3, 43, 89, 114
Newcomer, B. F. 2
Newcomer, W. 78
Newell, L. C. 69
Newhall, B. 55, 65
Newhall, C. W. 81
Nichols, E. L. 51
Nichols, J. L. 58, 73
Nicolassen, G. F. 51, 60
Nightingale, C. E. 41
Niles, C. W. 32
Nitobe, I. 79
Nitze, W. A. 12, 52, 81
Nixon, H. B. 52, 61
Noble, E. R. 40
Norris, H. H. 85
Norris, J. F. 57, 69, 80
Norris, R. S. 71
Northrup, E. F. 56, 69
Norton, E. L. 37
Novak, V. 12
Noyes, F. B. 81
Noyes, W., Jr. 52
Noyes, W. A. 60
Ochsner, H. W. 30
O'Connor, B. F. 51, 60
O'Donovan, J. H. 77
Oehm, A. A. 78
Ogden, P. 9, 71

Page.
O'Harra, C. C. 72
Oliver, E. S. 82
Olsen, J. C. 19
Opie, E. L. 13, 72, 81
Oppenheimer, A. R. 78
Orndorff, W. R. 53, 62, 75
Osborn, H. L. 51, 60
Osler, W. 4, 44, 91
Ott, I. 50
Ottley, C. W. 23
Owsley, P. O. 23
Packard, M. S. 72
Page, J. 74
Page, W. H. 50
Painter, C. F. 79
Palmer, A. G. 52, 61, 74
Palmer, C. 51, 60, 78
Palmer, C. S. 53, 61
Palmer, E. L., Jr. 87
Palmer, J. H. 87
Palmer, N. 78
Pancoast, O. B. 72
Parham, D. P. 19
Parker, H. P. 27, 83
Parker, J. D. 82
Parks, R. M. 66
Parsons, L. A. 19
Passano, L. M. 78
Patek, A. J. 78
Paton, S. L. 8
Patrick, G. T. W. 53, 63
Patterson, A. M. 19
Pattillo, N. A. 71
Pattison, H. 84
Pease, E. M. 52
Pease, H. D. 57
Peckham, A. W. 82
Pell, A. 58, 71
Pelton, G. I. 80
Pender, H. 14, 84
Penick, D. A. 58, 72
Penniman, G. D. 75
Penniman, T. D. 72, 80
Penrose, C. A. 72, 81
Penrose, C. B., Jr. 81
Peppler, C. W. 57, 72, 80
Perkins, C. A. 52, 60
Perkins, H. F. 19
Perkins, R. G. 78
Perkins, W. H., Jr. 75
Perry, H. M. 51
Persinger, C. E. 19
Pessels, C. 68
Peters, J. G. 87
Petrie, G. 65
Pettigrew, T. 78

Page.
Phelps, C. E., Jr. 85
Pindell, D. S. 82, 86
Piper, J. 81
Pleasants, A. W. 79
Pleasants, J. 76
Pleasants, J. H. 2
Pleasants, J. H., Jr. 23, 82
Pleasants, R. H., Jr. 76
Poetter, G. R. 82
Poinier, P. P. 50
Poor, C. L. 6, 43, 55, 66
Porter, K. 73
Post, J. E. H. 82
Potts, L. M. 19
Powell, H. T. 86
Powell, L. P. 78
Powell, M. W. 37
Powers, H. W. S. 37
Poyen-Bellisle, R. de 56
Pratt, J. H. 73
Pratt, W. S. 51
Prentiss, R. W. 51
Preston, E. D. 50
Preston, J. O. 41
Prettyman, C. W. 53
Price, H. W. 75
Prince, J. D. 56, 66
Pullen, F. K. 27
Purcell, T. N. De L. 37
Purnell, J. H. 82
Pyle, T. L. 14, 84
Rabinovitch, I. E. 41
Radcliff, W. 42
Radcliffe, G. L. P. 14, 83
Radford, R. S. 69
Raffel, H. B. 40
Ragland, C. D. 58, 71
Ragland, G. 19
Ramage, B. J. 61
Rambeau, A. 6, 43, 44, 107
Ramsay, A. 83
Ramsay, O. G. 9
Rand, R. F. 25
Randall, D. R. 53, 62
Randall, W. W. 64
Randolph, A. M., Jr. 79, 85
Randolph, R. L. 7
Ray, C. A. 82
Rayner, A. W. 42
Read, W. A. 19
Reader, F. E. 77
Reber, S. 85
Reed, D. M. 25
Reede, E. H. 30
Reeder, C. L. 86
Reese, A. L. 85

Page.
Reese, A. M. 19, 80
Reese, C. L. 8, 119
Reese, H. M. 14, 83
Reese, R. M. 74
Reeves, E. D. 40
Reeves, J. S. 68
Reeves, W. P. 67, 78
Rehberger, G. E. 37
Rehberger, J. M. 41
Reid, E. E. 58, 72
Reid, H. F. 6, 43, 44, 52, 61, 73, 122, 128
Reid, L. W. 78
Reik, H. O. 9
Reizenstein, M. 71, 82
Remsen, C. M. 37
Remsen, I. 3, 43, 44, 89, 92, 119
Renouf, E. 4, 44, 119
Renouf, V. A. 14. 84
Rettger, L. 77
Reuling, R. 31
Reutlinger, C. 85
Reymann, L. A. 37
Rhoads, E. 72
Rice, H. J. 50
Rich, H. L. 31
Richardson, E. G. 74
Richardson, G. M. 55, 64
Riggins, E. N. 30
Riggins, J. A. 40
Riggs, T. F. 30
Riley, F. L. 57, 70
Ritchie, A. C. 83
Rittler, W. F. 79
Roberts, B. T., Jr. 75
Roberts, D. E. 77
Roberts, F. 85
Roberts, W. M. 80
Robertson, J. C. 55, 66
Robinson, A. J. 74
Robinson, E. A., Jr. 37
Robinson, G. C. 37
Robinson, J. A. 82
Robinson, R. 78
Rogers, C. P. 30
Rogers, R. W. 76
Rolando, H. 74
Ross, E. B. 55, 65
Rosenau, W. 19
Rosenbaum, L. 83
Rosenheim, S. 23, 82
Rosenthal, L. 77
Ross, C. H. 55, 66
Ross, E. A. 65
Ross, W. L. 37
Rosze1, B. M. 56, 70, 78
Rothermel, J. J. 85

Page.
Roulston, R. B. 37
Rous, F. P. 37
Routh, J. E. 37
Rowe, R. B. 11, 19
Rowland, A. J. 85
Rowland, H. A. 3, 43, 90, 116
Rowland, W. L. 51
Royce, J. 50, 59
Rubel, M. J. 27
Rubenstein, C. A. 19
Rushmore, S. 27
Rusk, G. Y. 25, 83
Russell, G. W. 20
Russell, H. L. 66
Russell, W. W. 7
Rutter, F. R. 58, 71, 82
Ryland, G. 72
Ryttenberg, M. R. 75
Sabin, F. R. 25
Sadtler, J. G. 78
Saffold, W. B. 58, 72
Sale, L. 74
Salter, J. C. 27
Sampson, J. A. 23
Sanders, H. N. 12, 58
Sanders, W. E. 33
Sands, G. 11, 78
Sanford, E. C. 54, 63
Sato, S. 62
Saunders, A. P. 56, 68
Saunders, C. E. 55, 65
Saunders, F. A. 14
Saussure, R. de. 69
Savage, A. D. 50
Savage, C. A. 20, 82
Sayler, J. A., Jr. 40
Sayre, H. A. 70
Scaife, W. B. 76
Schanfarber, T. 20
Schenck, B. R. 78
Schenck, C. C. 20, 81
Schermerhorn, A. V. R. 37
Schimper, A. F. W. 51
Schmeckebier, L. F. 14, 83
Schmidt, F. G. G. 57, 70
Schneider, J. P. 20
Schoepf, T. H. 20
Scholl, G. B. 30, 84
Schouler, J. 10, 111
Schulz, A. H., Jr. 14, 83
Schulz, W. F. 85
Schunck, J. F. 83
Schwab, M. 86
Scott, J. A. 57, 71
Scott, W. A. 66
Search, C. J. 79

Page.
Sedgwick, W. T. 51, 59
Seth, A. L. 21, 84
Sewall, H. 50, 59
Shattuck, G. B. 9, 58, 71, 122
Shaw, A. 60, 112
Shaw, J. E. 14, 83
Shefloe, J. S. 55, 64
Sherwood, S. 6, 43, 44, 65, 109
Shields, T. E. 69
Shinn, C. H. 75
Shipley, G. 12, 71
Shippen, L. P. 40
Shober, W. B. 66
Short, H. A. 61
Shreeves, B. B. 78
Shreve, O. F. 37
Shriver, A. J. 79
Shriver, W. P. 40
Shuter, H. P. 83
Sigerfoos, C. P. 71
Sihler, C. 50, 59
Sihler, E. G. 50, 59
Sikes, E. W. 71
Silver, J. A. 69
Silver, M. E. 33
Silverberg, M. 30
Simis, M. P. 27
Simmons, W. W. 20
Simon, C. E. 77
Simonds, T. S. 70
Simpson, J. N. 30
Siousat, St. G. L. 14, 83
Slagle, R. L. 68
Slaughter, M. S. 53, 65
Slemons, J. M. 27 83
Small, A. W. 63
Smiley, J. L. 79
Smith, C. A. 12, 67
Smith, C. L. 54, 53
Smith, C. S. 14
Smith, F. R. 8
Smith, F. W. 84
Smith, G. O. 57, 70
Smith, H. M. 27
Smith, K. F. 6, 43, 44, 63, 99
Smith, R. M. 84
Smith, R. T., Jr. 40
Smith, S. K. 79
Smith, V. E. 20, 84
Smith, W. F. 76
Smith, W. L. 40
Smull, M. N. 37
Smyth, A. H. 76
Snavely, C. 20
Snavely, G. E. 38
Snively, A. B. 80

Page.
Snowden, S. G. 78
Soho, A. M. 72
Sohon, M. D. 70
Sommerville, C. W. 20
Sonneborn, S. B. 81
Soper, M. A. 81
Southall, J. P. C. 12
Sowers, W. F. M. 25
Sparks, C. B. 20
Sparks, F. E. 70, 81
Speirs, A. E. 81
Spiers, F. W. 70
Spencer, A. C. 70
Spencer, C. J. 86
Spencer, E. M. 41
Spencer, L. C. 38
Spieker, E. H. 6, 43, 44, 51, 60, 73, 98
Spilman, E. A. 38
Spragins, S. H. 83
Spratt, C. N. 27
Squier, G. O. 56, 67
Stacey, S. G. 56
Staley, M. V. 57
Stearns, C. M. 84
Stearns, J. S. 80
Steele, R. B. 55, 64
Steenken, C. D. 80
Steensland, H. S. 23
Stein, G. 27
Stein, J. S. 40
Stein, L. D. 20, 84
Stein, M. D. 76
Stein, S. H. 82
Steiner, B. C. 7, 44, 55, 65, 109
Steiner, H. 75
Steiner, W. R. 11, 73
Steinfeld, A. L. 27, 83
Steinhardt, E. 33
Stephens, C. G. 40
Stephens, J. C. 41
Stephens, J. L. 40
Stephenson, A. 64
Stern, L. 80
Stevens, A. R. 83
Stevens, D. G., Jr. 56, 68, 79
Stevens, L. L. 80
Stevens, L. T. 52, 74
Stewart, C. M. 2
Stewart, C. M., Jr. 79
Stewart, G. L. 80
Stewart, J., Jr. 80
Stewart, R. C. 80
Stewart, W. P. 84
Stidman, A. G. 14, 84
Stiles, C. W. 10
Stoddard, W. B. 71

Page.
Stokes, G. C., Jr. 75
Stokes, H. N. 51, 60
Stokes, J. E. 78
Stone, E. A. 25
Stone, W. R. 23
Stratton, A. W. 56, 69
Stratton, W. E. 74
Straus, H. P. 38
Straus, I. L. 78
Straus, T. 85
Straus, W. E. 84
Strickler, W. R. 73
Strickler, E. H. 82
Stringham, W. I. 50, 58
Strobel, E. R. 23, 82
Strong, R. P. 72
Strouse, E. 40
Struth, O. A. 38
Stubbs, M. B. 66
Studebaker, J. E. 33
Sudler, M. T. 11, 20, 72
Sumwalt, J. W. R. 20, 83
Satphen, M. C. 20
Swaine, J. W. 41
Swan, J. N. 67
Swartz, C. K. 77
Swett, C. M. 27
Swift, M. I. 51, 61
Swindell, W. R., Jr. 38
Sykes, F. H. 56, 68
Sylvester, J. J. 89
Symington, W. S., Jr. 69, 79
Taber, H. 63
Takaki, M. 69
Taliaferro, T. H. 57, 70
Tallant, A. W. 30
Taneyhill, G. L., Jr. 38
Tarleton, R. M. 77
Tatnall, R. R. 69
Taveau, R. 38
Tayler, L. 31, 33
Taylor, J. S. 85
Taylor, R. T. 78
Taylor, W. H. 78
Teillard, X. 11, 21
Thayer, A. E. 54
Thayer, W. S. 6, 91
Theobald, S. 5
Thieme, H. P. 71, 81
Thom, J. P., Jr. 82
Thom, W. T. 11, 13
Thomas, D. H., Jr. 81
Thomas, F. McS. 85
Thomas, H. M. 5
Thomas, J. H. 83
Thomas, R. H. 38

Page.
Thomas, T. P. 69
Thomas, W. J. 75
Thomas, W. S. 78
Thompson, H. D. 53
Thompson, H. O. 76
Thomson, J. M. 83
Thorne, J. 70
Tiffany, H. T. 74
Todd, H. A. 61
Todd, R. I. 85
Todd, W. J. 33
Tolman, A. H. 53
Tolman, W. H. 65
Tondorf, F. A. 20
Torrence, R. M. 82
Torsch, C. B. 83
Trippe, J. M. 83
Trueman, J. S. 54
Trull, G. H. 82
Tudor, C. G. 82
Tupper, F., Jr. 56, 67
Tupper, J. W. 69
Turnbull, B. 38
Turnbull, E. L. 81
Turner, A. B. 80
Turner, F. J. 64
Turner, H. J. 20, 80
Tuska, B. S. W. 76
Tyler, J. C. 20
Tyler, J. E. 38
Tyson, M. V. 82
Uhl, L. L. 63
Uhler, H. S. 82
Uhler, P. R. 7
Uhrbrock, R. H. 21
Ullmann, H. M. 66, 78
Ulman, J. N. 84
Ulrich, H. L. 27
Underhill, A. J. 27, 83
Van Arsdall, C. B. 30
Van Denburgh, J. 30
Van Velzer, C. A. 50
Van Vleck, E. B. 54
Van Vleet, A. H. 33
Van Vorst, F. B. 50
Vea, M. M. J. 79
Venable, R. M. 2
Verhoeff, F. H. 23
Ver Planck, J. de L. 38
Vincent, J. M. 6, 43, 44, 64, 109
Vogeler, C. A. 40
Voorhees, H. 51
Vos, B. J. 6, 43, 44, 55, 66, 105
Waidner, C. W. 9, 58, 72, 83, 85
Walden, E. C. 20
Walker, A. E. 33

Page.
Walker, E. E. 73
Walker, M. B. 27
Walker, M. S. 68
Wall, O. A., Jr. 83
Wallis, W. F. 20, 83
Wals, J. L. 9
Walz, W. F. 75
Ward, G. W. 71
Warfield, F. H. 83
Warfield, J. O. 81
Warfield, L. M. 11, 27, 83
Warfield, M. 74
Waring, J. M. S. 86
Warner, A. G. 54, 63
Warner, A. J. 85
Warner, H. M. 40
Warren, F. M. 10, 62
Warren, G. W. 27, 83
Warren, H. A. 78
Warren, Minton. 4, 43, 44, 98
Warren, Mortimer. 25
Watase, S. 49, 54, 64, 177
Waters, C. E. 11, 21, 82
Watkins, A. C. 82
Watson, E. L. 80
Watts, C. S. 78
Watts, S. H. 11, 27
Weaver, C. C. 21
Weech, R. W. H. 76
Weeks, S. B. 65
Weglein, D. E. 83
Weida, G. F. 56, 68
Welbourn, J. A. 83
Welch, W. H. 3, 43, 44, 90, 136, 138
Wells, B. W. 51
Wells, E. A. 28
Wells, M. 28
Wenner, H. M. 83
Werber, O. S. 37
West, A. P. 40
West, C. J. 80
West, H. S. 14, 81
West, J. M. 25, 83
Wetzel, W. A. 69
Wharey, J. B. 21
Whealton, L. N. 71
Wheeler, A. W. 51
Wheeler, J. H. 50
Whetham, C. 53
Whitaker, H. A. 82
White, E. L. 77
White, F. 2, 88
White, J., Jr. 55, 65, 77
White, W. D. 85
Whitehead, J. B. 9, 84, 85, 116
Whitelock, W. W. 78

Page.
Whiteman, S. E. 8, 138
Whiteside, S. 83
Whitfield, G. T. 81
Whitman, C. O. 51
Whitman, H. S. 40
Whitridge, A. H. 73
Whitridge, W. 78
Wickes, P. L., Jr. 81
Wiegand, H. H. 75, 84
Wiesenfeld, B. 76
Wight, C. 83
Wight, O. B. 80
Wightman, A. C. 54, 63
Wightman, J. R. 54, 63
Wilcox, F. S. 85
Wilhelm, L. W. 52, 61, 73
Wilkens, F. H. 13, 75
Wilkes, G. 84
Wilkinson, A. L. 21
Willard, J. M. 56
Williams, C. L. 31
Williams, D. 30, 83
Williams, H. W. 74
Williams, J. W. 6, 76
Williams, L. 76
Williams, W. K. 63, 76
Williams, W. W. 23, 82
Willis, B. 10, 122
Willis, E. W. 76
Willoughby, W. F. 77
Willoughby, W. W. 7, 55, 65, 77, 109
Wilson, E. B. 51, 59
Wilson, F. D. 21
Wilson, F. W. 81
Wilson, H. L. 8, 57, 70, 99
Wilson, H. M. 83
Wilson, H. V. 49, 54, 63, 74, 177
Wilson, P. 83
Wilson, R. H. 9, 72, 80
Wilson, W. 53, 62
Wingard, J. J. 83
Wingert, H. F. 76
Wingert, M. 83
Wingert, W. 82
Winne, C. K., Jr. 28, 83
Winslow, J. R. 76
Winslow, N. 83
Winston, J. H. C. 21
Wirt, C. B. 41
Witzenbacher, W. J. 74
Wolf, A. G. 78
Wolf, M. W., Jr. 40
Wolfenstein, L. 81
Wolff, F. A., Jr. 56, 67, 78
Wood, C. C. 82
Wood, H. 4, 43, 44, 105

Page.
Woodburn, J. A. 55, 64
Woodford, A. B. 65
Woods, A. C. 76
Woods, C. F., Jr. 71, 80
Wooldridge, P. J. 84
Woolley, P. G. 25
Worthington, T. K. 63
Wright, A. 40
Wright, C. Baker 53
Wright, C. Benj. 30
Wright, F. B. 21
Wright, H. C., Jr. 41
Wright, J. H. 79
Wyckoff, S. D. 23
Yager, A. 61
Yates, L. 23
Young, A. V. E. 50
Young, F. G. 76
Young, H. H. 9
Young, J. F. 21, 84
Young, J. W. 85
Zahm, A. F. 72
Zeigler, O. W. 79
Zies, F. 41

INDEX.

Academic Council, 43.
Academic Staff, 3–11, 45.
Admission to graduate courses, 95; to college courses, 162.
Advisers, 162; board of advisers, 44.
American chemical journal, 89.
American journal of mathematics, 89.
American journal of philology, 89.
Anatomy, courses in, 135.
Anglo-Saxon, courses in, 104.
Annual register, 90.
Annual report, 90.
Applied electricity, proficients in, 84,
Assistants, 8, 9, 11.
Associate professors, 6.
Associates, 7, 8.
Assyriology, courses in, 100; publications, 90.
Attendance on courses, 46.
Attendants on single courses, roll of, 21, 42; fees, 188.

Bachelors of arts, roll of (1879–98), 73–84; see also collegiate instruction.
Bacteriology, courses in, 137.
Biological sciences, courses in, 130; publications, 89.
Botany, courses in, 133; for admission, 166.
Bruce fellowship, 13, 49, 177.

Calendar, 93.
Candidates for matriculation, 146, 163, 167; course for, 146; roll of, 38–40.
Caution money, 182.
Chemistry, courses in, 119; for admission, 166.
Collegiate advisers, board of, 44.
Collegiate instruction, plan of, 145; admission to, 162; groups, 151–157; synopsis of groups, 158; schedule of hours, 159.
Collegiate students, roll of, 34–42.
Comparative philology, courses in, 99.
Courses of instruction, general statements, 95.

Degrees; see doctors of philosophy and bachelors of arts.
Diplomas, fees for, 183.
Doctors of medicine, roll of (1897), 72; see also medical school.
Doctors of philosophy, regulations, 141; roll of (1878–97), 59–72.
Drawing, courses in, 138, 148.

Economics, courses in, 112.
Elocution, 139.
English, courses in, 101; for admission, 165.
Ethics, courses in, 114.
Examinations, dates of, 93.
Expenses, 182.

Faculty, 3–11.
Fees, 182–185.
Fellowships, 174; object of foundation, 174; regulations, 176; present fellows, 13; roll of fellows (1876–97), 49–58.
Fellows by courtesy, roll of, 12; appointment of, 174.
French, courses in, 107; for admission, 164.

Geology, courses in, 122.
Geological survey, reports, 90; organization of, 128.
German, courses in, 105; for admission, 164.
Government of the university, 43.
Graduate instruction, 95.
Graduate students, admission of, 95; roll of, 12–21; places of graduation, 47.
Graduation fees, 183.
Greek, courses in, 97; for admission, 164.
Groups of college courses, 151–157; characteristics of, 147; synopsis of, 158.
Gymnasium, committee on, 44; use of, 140; fee, 182.

Hebrew, courses in, 100.
Historical statement, 92.
History, courses in, 109; for admission, 166.
History of philosophy, courses in, 113, 114.
Hopkins scholarships, 180.
Hours of college courses, 159.

Institutions in which enrolled students were graduated, 47.

Internes of the Hospital, 11.
Instructors and assistants, 8, 9, 11.
Italian, courses in, 108.

Johns Hopkins Hospital, publications, 90; internes, 11.
Johns Hopkins Press, 89–91.
Journal of experimental medicine, 90, 138.

Laboratories, see special subjects.
Laboratory charges, 183.
Latin, courses in, 98; for admission, 164.
Lecturers, 10.
Levering lecturer, 10.
Library, 87; library committee, 44; libraries of Baltimore and Washington, 87.
Logic, courses in, 113.

Mathematics, courses in, 114; for admission, 164.
Matriculates, roll of, 34–38.
Matriculation, dates of examinations, 93; requirements for, 162, 164; division of examinations, 167.
Medical school, 169; terms of admission, 169; plan of instruction, 171; candidates for M. D., 22–30; physicians attending courses, 31–33; graduates of, 72; advisory board, 44; fees, 184.
Memoirs from biological laboratory, 89.
Mineralogy, courses in, 123.
Modern language notes, 90, 108.

Oriental seminary, 100.

Palæontology, courses in, 123.
Pathology, courses in, 136.
Peabody library, 87.
Petrography, courses in, 124.
Philosophical faculty, 95.
Philosophical students, roll of, 15–21.
Philosophy, courses in, 113.
Physical culture, 140, 148.
Physical geography, 166.
Physicians, courses for, 173.
Physics, courses in, 116.
Physiology, courses in, 134.
Politics, courses in, 111.
Preliminary medical course, 149, 153.
President, 2, 3, 43.
Professors and instructors, 3–11, 45.
Proficients in applied electricity, 84–86.
Psychology, courses in, 113.
Publications, 89–91.
Public speaking, 139.

Registration fee, 182.
Residences of students, 46.
Romance languages, courses in, 107.

Sanskrit and comparative philology, courses in, 99.
Scholarships, 179; roll of university scholars, 14.
Science for admission, 166; see special subjects.
Semitic philology, courses in, 100.
Societies, 92.
Spanish, courses in, 108.
Special students, admission of, 163, 168; roll of, 41.
Students, roll of, 12–42; summary of, 45; classification by residence, 46; places of graduation, 47.
Studies from the biological laboratory, 89.
Studies in historical and political science, 89; see also history.
Synopsis of groups, 158.

Tabular statements, 45–92.
Treasurer's office, regulations of, 88.
Trustees, 2, 43; committees of, 2.
Tuition fees, 182; charges for attendance on lectures, 182.

Undergraduates, roll of, 34–42.
University circulars, 89.
University instruction, plan of, 95.
University scholars (1897–98), 14; regulations, 179.
University studies, board of, 43.

Vocal culture, 139, 148.

Washington scholarships, 181.
Weather service, 129.
Woodyear scholarships, 181.

Y. M. C. A., advisory board, 44.

Zoölogy, courses in, 130.

[Issued May 29, 1899].

THE JOHNS HOPKINS PRESS
OF BALTIMORE.

I. American Journal of Mathematics. T. Craig, Editor, with the co-operation of S. Newcomb. Quarterly. 4to. Volume XX in progress. $5 per volume.
II. American Chemical Journal. I. Remsen, Editor. Ten nos. yearly. 8vo. Volume XX in progress. $4 per volume.
III. American Journal of Philology. B. L. Gildersleeve, Editor. Quarterly. 8vo. Volume XIX in progress. $3 per volume.
IV. Studies from the Biological Laboratory. 8vo. Volume IV complete.
V. Studies in History and Politics. H. B. Adams, Editor. Monthly. 8vo. Volume XVI in progress. $3 per volume. Sixteen extra volumes of this series are also ready.
VI. Johns Hopkins University Circulars. 4to. Monthly. Volume XVII in progress. $1 per volume.
VII. Johns Hopkins Hospital Bulletin. 4to. Monthly. Volume IX in progress. $1 per volume.
VIII. Johns Hopkins Hospital Reports. 4to. Volume VII in progress. $5 per volume.
IX. Contributions to Assyriology, etc. Volume IV in progress.
X. Selected Morphological Monographs. W. K. Brooks, Editor. Volume IV in progress.
XI. Modern Language Notes. A. M. Elliott, Editor. 4to. Monthly. Volume XIII in progress. $1.50 per volume.
XII. Journal of Experimental Medicine. W. H. Welch, Editor. 8vo. Bi-monthly. Volume III in progress. $5 per volume.
XIII. American Journal of Insanity. Henry M. Hurd, Editor. 8vo. Quarterly. $5 per volume.
XIV. Annual Report of the President of the Johns Hopkins University.
XV. Annual Register of the Johns Hopkins University.

A New Critical Edition of the Hebrew Text of the Old Testament. Edited by Paul Haupt. Prospectus on application.
Rowland's Photograph of the Normal Solar Spectrum. Ten plates. $20.
Description of the Johns Hopkins Hospital. J. S. Billings, Editor. 116 pp., 56 plates. 4to. $7.50.
The Teaching of the Apostles (complete facsimile edition). J. Rendel Harris, Editor. 110 pp. and 10 plates. 4to. $5.00.
Reproduction in Phototype of a Syriac MS. with the Antilegomena Epistles. I. H. Hall, Editor. $4.00.
The Constitution of Japan. 48 pp. 16mo. 50 cents.
Essays and Studies. By B. L. Gildersleeve. 520 pages. 4to. $3.50.
Studies in Logic. By members of the Johns Hopkins University. C. S. Peirce, Editor. 123 pp. 12mo. $2.00.
Geological and Topographical Maps of Baltimore and Vicinity. $1.00 each.
Essays in the Constitutional History of the United States. J. Franklin Jameson, Editor. $2.25.
The Genus Salpa. By W. K. Brooks. 396 pp. 4to. 57 plates. $7.50.
Selections from the Early Scottish Poets. By William Hand Browne. 240 pp. 16mo. $1.25.

A full list of publications will be sent on application.

Business communications should be addressed to the Johns Hopkins Press.

JOHN MURPHY & CO., PRINTERS, BALTIMORE.

PROGRAMMES FOR 1898-99.

The Johns Hopkins University Circular containing announcements of the courses offered for the academic year beginning October 1, 1898, may be had on application to the Registrar of the Johns Hopkins University.

The Johns Hopkins Medical School.

The detailed announcements of the Johns Hopkins Medical School are made in a separate pamphlet, which may be had on application to the Registrar of the University.

THE NEW YORK PUBLIC LIBRARY
REFERENCE DEPARTMENT

This book is under no circumstances to be taken from the Building

Form 410